





NLM 00560856 6





# DUE TWO WEEKS FROM LAST DATE

JUN 2 0 1956

NOV 7 1986



# THE INTERNATIONAL SCIENTIFIC SERIES.



# RESPONSIBILITY

IN

# MENTAL DISEASE.

 $\mathbf{BY}$ 

# HENRY MAUDSLEY, M.D.,

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS, PROFESSOR OF MEDICAL JURIS-PRUDENCE IN UNIVERSITY COLLEGE, LONDON, ETC., ETC.;

AUTHOR OF "BODY AND MIND," "PHYSIOLOGY AND PATHOLOGY OF THE NERVOUS SYSTEM."



NEW YORK:
D. APPLETON AND COMPANY,
549 AND 551 BROADWAY.
1874.

WM M4487 . 1874

# CONTENTS.

#### CHAPTER I.

#### INTRODUCTORY.

PAGE

Insane persons in asylums: how much they resemble and how much they differ from sane persons—Erroneous popular and legal notions-Feeling of repulsion towards insanity-Cruel treatment of the insane : from what causes it originated-Effects of the theological and the metaphysical spirit-Mind a function of brain, and disordered mind a result of disordered brain-Influence of bodily organs on mental function-Physiological method of inquiry indispensable; inadequacy of psychological method-Development of nervous system by education, and its necessary limits-The tyranny of organization-Hereditary influence-Moral responsibility-The criminal nature-Hereditary crime -The production of criminals: their defective physical and mental organization, and proneness to disease-Border-land between insanity and crime-Causes, course, and varieties of intellectual and moral degeneracy to be studied by the inductive method. 1 - 37

### CHAPTER II.

#### THE BORDERLAND.

No distinct line of demarcation between sanity and insanity—Continuity in nature—The borderland—The insane temperament—
Transformation of nervous diseases—Kinship between insanity and epilepsy, neuralgia, chorea, dipsomania—Functional and organic diseases of the brain—Hereditary predisposition: its pathological evolution through generations—Originalities of

PAGE

idea, feeling and impulse in connection with it—Insanity and the prophetic mania—The prophets of the Old Testament—
The epileptic nature of Mahomet's visions and revelations—
The madman and the reformer—Eccentricity and insanity—
Deficiency or absence of moral sense a congenital fault of mental organization—Crime and insanity—Moral sense: its acquisition in the course of evolution; and its dependence upon organization—Physical conditions of moral degeneracy—Conclusions.

#### CHAPTER III.

#### DIFFERENT FORMS OF MENTAL DERANGEMENT.

Idiocy and imbecility—Kleptomania, pyromania, &c., often mark imbecility—Intellectual and Affective insanity—General and partial mania — Monomania and melancholia — Dementia—General paralysis of the insane—Objections to the received system of classification according to certain prominent mental symptoms only—The lines on which it is proposed to lay down a better system—The diagnosis of insanity a strictly medical question — Morel's proposed classification — Skae's proposed classificatiou—The path of future medical inquiry—The physician's duty to declare the truth, however unpopular it may be.

### CHAPTER IV.

#### LAW AND INSANITY.

Early legal notions of insanity—Lord Hale's dictum—Mr.
 Justice Tracey's wild beast theory of madness—The trial of
 Hadfield: Erskine's declaration that delusion was the true character of insanity—The trial of Bellingham: Chief Justice
 Mansfield's dictum that a knowledge of right and wrong generally was the proper criterion of responsibility—The trial of
 McNaughten: answers of the English judges to questions put

PAGE

by the House of Lords—A knowledge of right and wrong in reference to the particular act at the time of committing it laid down as the true criterion of responsibility—One exception to this rule formulating the question to be left by the judge to the jury—Assumption by the judge of the function of the jury—Criticism of the answers of the English judges by American judges—Uncertainty of result in English trials where insanity is alleged—The dicta of American judges: cases of Boardman v. Woodman, State v. Jones, and State v. Pike—Articles of the French penal code and of the latest German penal code—Comment upon the right-and-wrong theory of responsibility.

#### CHAPTER V.

#### PARTIAL INSANITY.

## I.—Affective Insanity.

Insanity comprises several forms of mental derangement—Variations in the character of the symptoms of each form at different periods of its course—Early symptoms sometimes little marked, but of great significance: examples—Medical observation alone of the early stages of any value: misinterpretation of them by lawyers and others—Uselessness of the capital punishment of insane persons as an example to others.

Affective insanity: 1. Impulsive insanity. Insane suicidal impulse or suicidal monomania: examples—Pathological nature of the insane impulse: an inability to control it may be accompanied by a consciousness of its morbid nature—Suicidal insanity strongly hereditary: example—Homicidal monomania: examples—Discussion of its nature—Perverted desires and deranged

impulses common features in all forms of mental derangement -Symptoms of derangement before an outbreak of homicidal insanity-Latent tendencies may discover themselves for the first time on the occasion of a powerful exciting cause-Conditions precedent of an outbreak: a. the insane neurosis; b. the epileptic neurosis -a. Insane neurosis: with some degree of imbecility - case of Burton: without imbecility, but with manifestation of insane tendencies-case of Alton murderer-The homicidal impulse: was it irresistible or unresisted ?-b. Epileptic neurosis: the homicidal mania may precede, take the place of, or follow an epileptic fit-2. Moral insanity: its characteristic features and its causation-Moral alienation often precedes intellectual derangement, and remains after this has passed away; attacks of it may alternate with attacks of regular mania and melancholia-Folie circulaire-Moral alienation in connection with epilepsy-Congenital moral imbecility-Conclusion. 121-184

#### CHAPTER VI.

#### PARTIAL INSANITY.

# II.—Partial Intellectual (or Ideational) Insanity.

Simple melancholic depression preceding intellectual derangement: homicidal or suicidal outbreak: case of Charles Lamb's sister—Melancholia with hypochondriacal hallucinations and delusions; homicide—Delusions of suspicion or persecution, and homicidal mania: case of Dr. Pownall—Concealment of their delusions by insane persons—Bodily symptoms preceding an outbreak of homicidal mania: the characters of the attack—Dangerous character of the insanity that is accompanied by delusions of persecution—An insane person does murder out of revenge: is he a responsible agent?—Futility of argument against a delusion: a limited delusion indicates deeper mental derangement: examples—Premeditation in planning and ingenuity in perpetrating homicide entirely consistent with insanity: ex-

PAGE

ample - Danger of recurrence of homicidal mania: examples -Conduct of insane persons after a homicidal act-Homicidal insanity in which, first, the act is the direct offspring of the delusion; and, secondly, in which it cannot be traced to its influence - Hoffbauer's metaphysical criterion of responsibility—The medical doctrine that partial insanity excludes the idea of criminality, whether or not the acts are the results of delusion: the reasons on which it is based-Discussion of the legal and medical views with regard to the working of an insane delusion in the mind: examples showing the impossibility of tracing its workings-Pathological meaning of the existence of an insane delusion, however limited-The right problem in homicidal insanity is to trace a connection, not between the delusion and the act, but between the disease and the act .. . 185-226

#### CHAPTER VII.

#### EPILEPTIC INSANITY.

Mania following epilepsy: its furious character—Masked epilepsy—Mental disorder preceding the epileptic attack—Epileptiform neurosis manifesting itself in periodical attacks of mental derangement: examples—Description of the symptoms of epileptic insanity: of those that go before and foretell an attack; of those that are exhibited in the milder and the more severe forms of the disease; and of those that are met with after long-continued epilepsy—Peculiar states of epileptic consciousness—Epileptic visions—Transitory mania, of epileptic origin: examples—Features of epileptic homicide—Transitory mania, without history of epilepsy—Somnambulism—The persistence of dream-hallucinations after waking from sleep. 227-253

#### CHAPTER VIII.

#### SENILE DEMENTIA.

Symptoms of scnile demontia in the order of their occurrence: loss of memory, impairment of perception, incoherent talk, in-

#### CHAPTER IX.

#### THE PREVENTION OF INSANITY

Man's power over himself to prevent insanity-Outcomes of an insanc temperament-The exercise of self-control in insanity-The gradual evolution of character-The development of will: its power over the thoughts and feelings-The propagation of insanity through generations-Unwise marriages-The tyranny of the passion of love-The degeneration and regeneration of families -The intensification of the neurotic type-Hereditary predisposition, intemperance, and mental anxieties as causes of insanity-Exposition of the evil effects of intemperance-The prevention of insanity by education—The aim of a liberal education-Self-culture as an aim of life-Inconsistencies of thought, feeling, and actions: the injury to character which they imply-The kind of mental activity involved in the conduct of business: how it fails to satisfy the requirements of true mental culture-Mistaken views of religious duties-The control of the emotions-Mental hard work not a cause of insanity—The full development of the mental faculties a protection against insanity-Undeveloped mentality-The study of the natural sciences as a means of intellectual and moral training-The reign of law in human evolution-The moral duties consequent on the intellectual recognition of it 268-308

# RESPONSIBILITY IN MENTAL DISEASE.

# CHAPTER I.

INTRODUCTORY.

Insane persons in asylums: how much they resemble and how much they differ from sane persons—Erroneous popular and legal notions—Feeling of repulsion towards insanity—Cruel treatment of the insane: from what causes it originated—Effects of the theological and the metaphysical spirit—Mind a function of brain, and disordered mind a result of disordered brain—Influence of bodily organs on mental function—Physiological method—Development of nervous system by education, and its necessary limits—The tyranny of organization—Hereditary influence—Moral responsibility—The criminal nature—Hereditary crime—The production of criminals: their defective physical and mental organization, and proneness to disease—Border-land between insanity and crime—Causes, course, and varieties of intellectual and moral degeneracy to be studied by the inductive method.

Notwithstanding the great change which has taken place in opinion and practice with regard to mental disease within the last century, there are still persons who, if invited to visit a lunatic asylum, would look on the proposal in much the same light as a proposal to visit the Zoological Gardens and inspect the wild beasts. They would certainly expect to see something entirely unlike

what they were used to see in their daily experience, and would probably come away not a little disappointed with the result of the visit: like Mr. Burke, they might ask, at the end of it, where the insane persons were. It is related of that great philosopher, orator, and statesman that, after going through the wards of a large lunatic asylum, he turned to the gentleman who had accompanied him, and said that he had not seen one person whom he considered insane. Thereupon his conductor called one of the patients who had particularly interested Mr. Burke by his ingenious political theories, and touched the subject of his delusions, when he began immediately to talk of the porcupine quills which he imagined to grow from his skin after each meal, and became so incoherent that Mr. Burke was convinced that madmen were not all like the pictures which Hogarth painted of them.

For the most part, they are very unlike. Of the inmates of an asylum, some few might present noticeable peculiarities of appearance, demeanour, and conversation; more would strike the observer by their dull look and listless attitude, as if they had no interest in anything in the heavens above or in the earth beneath; while others would not show, either by their looks or by what they said or did, that they were not as other men are. So much would the casual observer see. The skilled observer would see more, but even he would not find a new world and a new race of beings; he would find man changed, indeed, but not transformed. He would meet, as Esquirol has remarked, with "the same ideas, the same errors, the same passions, the same misfortunes: it is the

same world; but in such a house the traits are stronger, the colours more vivid, the shades more marked, the effects more startling, because man is then seen in all his nakedness, because he does not dissimulate his thoughts, because he does not conceal his defects, because he lends not to his passions the charm which seduces, nor to his vices the appearances which deceive."

Were the observer, whether casual or skilled, to reside for some length of time in an asylum, and thus to make himself practically acquainted with the ways, thoughts, and feelings of its inmates, he would certainly discover how great a mistake it is to suppose, as is often done, that they are always so alienated from themselves and from their kind as not to be influenced by the same motives as sane persons in what they do or forbear to do. When an insane person is on his trial for some criminal offence, it is commonly taken for granted by the lawyers that if an ordinary motive for the act, such as anger, revenge, jealousy, or any other passion, can be discovered, there is no ground to allege insanity, or, at any rate, no ground to allege exemption from responsibility by reason of insanity. The ideal madman whom the law creates is supposed to act without motives, or from such motives as it enters not into the mind of a sane person to conceive; and if some one, who is plainly mad to all the world, acts from an ordinary motive in the perpetration of an offence, he is presumed to have acted sanely and with full capacity of responsibility. No greater mistake could well be made. Much of the success of the modern humane treatment of insanity

rests upon the recognition of two principles: first, that the insane have like passions with those who are not insane, and are restrained from doing wrong, and constrained to do right, by the same motives which have the same effects in sane persons; secondly, that these motives are only effective within limits, and that beyond these limits they become powerless, the hope of reward being of no avail, and the expectation or infliction of punishment actually provoking more unreason and violence. By the skilful combination of these principles in practice it has come to pass that asylums are now, for the most part, quiet and orderly institutions, instead of being, as in olden times, dens of disorder and violence, and that the curious sight-seer, who visits an asylum as he would visit a menagerie, sees nothing extraordinary, and comes away disappointed.

And yet, although in much so like, how different is the madman essentially! Be the change in him what it may, it is plain that he has fallen from man's high estate, that he is no longer one with his kind, that he has lost the highest human attributes—those by which man is what he is among animals. Learned men may dispute concerning the nature and extent of the change; but the way-faring man, though a fool, cannot fail to perceive it. Nor does the change fail to influence him: deep in his heart there is generated an instinctive feeling of distrust, if not of actual repugnance; he recoils in spite of himself from the distortion of humanity. Notwithstanding much benevolence of sentiment towards those who are afflicted with insanity, and much righteous indignation against those

who ill-use them, it is still true that the public look upon the disease as a calamity of quite special kind, conceal it as a disgrace, and sometimes treat it as a crime. By the feeling evinced, so unlike that which any other disease elicits, one is reminded of the way in which the lower animals and some savages act when one of their number falls sick: they slacken not their speed to allow the sufferer to continue with them, but leave it by the wayside to perish alone; so far from helpful sympathy, they evince actual antipathy and drive it from among them: it is the saddest sight, indeed, to see the way in which animals thus persecute sometimes the sick and helpless member of the herd.

Happily it results from the moral development of civilized man that he does not so act towards one who has fallen sick of an ordinary bodily disease; on the contrary, the affliction elicits his warm sympathy and active help. But it is not in the same measure so when the sickness is a sickness of mind. There is a dim but deep instinct that this is not a disease which is quite like other diseases, that a man by it "from himself is ta'en away," alienated from himself and from his kind, and that he is something of a reproach to the nature of humanity; the result being a vague feeling of antipathy like that which the lower animals display towards one of their kind that has fallen ill. At bottom this might seem to be curious evidence of the operation of the law of natural selection, whereby a diseased member that is unfitted for the natural functions of its kind is instinctively extruded from companionship. Just

as the lower animals, and the savages who have to wander long distances, abandon or drive away the member that is incapacitated by bodily illness from holding its ground, and whose presence would be an encumbrance; so, in like manner, civilized nations, until recently, thrust out of sight into vile receptacles, where no mention of them more was heard, those members of the community who, through loss of reason, were unable to hold their own in the struggle for existence, and whose presence was felt as an encumbrance, a reproach, and a danger.\*

One of the saddest chapters in human history is that which describes the cruel manner in which the insane were treated in times past. Notwithstanding that it is happily a thing of the past, it will be instructive to inquire from what causes the barbarous usage sprang: for it was not common to all nations and all times; on the contrary, it had its birth in the ignorance and superstition of the dark ages of Christian Europe. Whatever may have been thought of madness among the peoples who preceded the ancient Greeks-and there is evidence that the Egyptians adopted a singularly enlightened and humane treatment-it is certain that the Greeks had comparatively sound theories of its nature as a disease to be cured by medical and moral means, and adopted principles of treatment in conformity with those theories. Their dramatic poets, it is true, present terrible pictures of madmen pursued by the anger of the gods; but these

<sup>\*</sup> In the four or five pages which follow, I have repeated in nearly the same words what has been already published in an address on "Conscience and Organization," in the second edition of my work on "Body and Mind."

were poetical representations, which must not be taken as a measure of the best knowledge of the time. Then, as now, and indeed as ever in the history of mankind, the true thinkers were emancipated from the fables and superstitions of the vulgar: the just measure of Greek intellect must be sought in the psychology of Plato, in the science of Aristotle, and in the medical doctrines of Hippocrates.

This eminent physician and philosopher expressly repudiates the notion that one disease is of more divine origin than another. After saying that the Scythians ascribe the cause of certain disorders to God, he goes on to give his own opinion that these and all other disorders are neither more nor less of divine origin," and no one of them more divine or more human than another; that each has its own physical nature, and that none is produced without or apart from its nature. In what he says of the psychical symptoms of various diseases of the body he evinces such enlarged views of the scope of medical observation and practice as are not often evinced at the present day; and the few observations in his works respecting the symptoms of delirium "evidence that clear and correct view of disease which has made this first observer a model to all succeeding times." He directs attention to such facts of observation as the physical insensibility of the insane, the appearance of mental diseases in the spring, the occurrence of disorder of the intellect after a continuance of fear and grief, the union of melancholy and epilepsy, the critical importance of hæmorrhoidal discharges in mania,

the difficulty of curing madness which commences after the age of forty, and the like. And as there was no superstition in these doctrines, so there was no barbarism in his treatment, which was medical, and consisted principally in evacuation by the use of hellebore. moral treatment was not unknown among the Greeks; for Asclepiades, who seems to have been the real founder of a psychical mode of cure, made use of love, wine, music, employment, and special means to attract the attention and exercise the memory. He recommended that bodily restraint should be avoided as much as possible, and that none but the most dangerous should be confined by bonds. Without going further into particulars, enough has been said to show that the Greeks had acquired accurate notions of madness as a disease, which was to be cured by appropriate medical and moral treatment.

How came it to pass that these enlightened views ever fell into oblivion? The question is really only a part of the larger question, how it came to pass that the high æsthetic culture and brilliant intellectual development of the Grecian era, which might have seemed possessions of mankind for ever, were lost in the darkness and barbarism of the middle ages. To trace the causes of this so sad decline would be far beyond my present purpose; suffice the fact that philosophy, which had mounted so high, was for a time sunk so low beneath the waves of superstition and ignorance, that it might well have never been in existence. And when at last a revival of learning took place, things were little better; empty scholastic subtleties

and metaphysical mysticism engaged the whole attention of men, who rivalled one another in verbal disputations, without agreement in the meaning of the terms they used, and in blind worship of the authority of Aristotle, without real regard to the true method of his philosophy or to the facts with which it dealt. As if knowledge were nothing more than a process of ingenious excogitation, they made no attempt to observe the phenomena of Nature, and to search out the laws governing them, but laboriously "invoked their own spirits to utter oracles to them;" wherefore philosophy was little more than a web of unmeaning terms and of empty metaphysical subtleties.

With this sort of intellectual activity was joined, as the result of the detestable spirit which inspired monastic teaching and monastic practice, a harsh religious asceticism, through which the body was looked down upon with contempt, as vile and despicable, the temple of Satan, the home of the fleshly lusts which war against the soul, and as needing to be vigilantly kept in subjection, to be crucified daily with its affections and lusts. It was the earthly prison-house of the spirit whose pure im mortal longings were to get free from it. Such was the monstrous doctrine of the relation of mind and body. What place could a rational theory of insanity have in such an atmosphere of thought and feeling? The conception of it as a disease was impossible: it was ascribed to a supernatural operation, divine or diabolical, as the case might be-was a real possession of the individual by some extrinsic superior power.\* If the ravings of the

<sup>\*</sup> The most learned physicians only put the devil a step further back,

person took a religious turn, and his life was a fanatical practice of some extraordinary penance—if, like St. Macarius, he slept for months together in a marsh, exposing his naked body to the stings of venomous flies,—or, like St. Simeon Stylites, he spent the greater part of his life on a pillar sixty feet high,—or, like St. Anthony, the patriarch of monachism, he had never, in extreme old age, been guilty of washing his feet,—he was thought to have reached the ideal of human excellence, and was canonized as a saint; more often his state was deemed to be a possession by the devil or other evil spirit, or the degrading effect of a soul enslaved by sin; from some cause or other he was a just victim of divine displeasure, and had been cast down in consequence from his high human estate.

It was the natural result of such views of madness that men should treat him whom they believed to have a devil in him as they would have treated the devil could they have had the good fortune to lay hold of him. When he was not put to death as a heretic or a criminal, he was confined in a dungeon, where he lay chained on straw; his food was thrown in, and the straw raked out through the bars; sight-seers went to see him, as they went to see the wild beasts, for amusement; he was cowed by the whip, or other instrument of punishment, and was more neglected and worse treated than if he had been a wild beast. Many insane persons, too, were acknowledging "such a preparation and disposition of the body through distemper of humours, which giveth great advantage to the devil to work upon; which distemper being cured by physical drugs and potions, the devil is driven away, and hath no more power over the same bodies."

without doubt executed as witches, or as persons who had, through witchcraft, entered into compact with Satan. It is a striking illustration, if we think of it, of the condition of thought at that time, and of the great change which has taken place since, that such expressions as the black art, witchcraft, diabolical possession, and the like, have fallen entirely out of use, and would be thought to convey no meaning if they were used now. They were fictitious causes invented to account for facts many of which undoubtedly lay within the domain of madness.

Now it is a fact, abundantly exemplified in human history, that a practice often lasts for a long time after the theory which inspired it has lost its hold on the belief of mankind. No wonder, then, that the cruel treatment of the insane survived the belief in diabolical possession, though it is justly a wonder that it should have lasted into this century. The explanation of the seeming anomaly is to be sought, I believe, in the purely metaphysical views of mind which prevailed long after inductive science had invaded and made conquests of other departments of nature. Theology and metaphysics, having common interests, were naturally drawn into close alliance, in order to keep entire possession of the domain of mind, and to withstand the progress of inductive inquiry. With the notions they cherished of the nature of mind, and of its relations to body, it was thought impossible, and would have been denounced as sacrilegious, to enter upon the study of it by the way of physical research. To have supposed that the innermost sanctuary of nature could be so entered through the

humble portals of bodily functions, would have been regarded as an unwarrantable and unholy exaltation of the body, which was full of all uncleanness, corruptible, of the earth earthy, and a gross degradation of the mind, which was incorruptible, of the heaven heavenly, and joint partaker of divine immortality. Whosoever had dared to propound such a doctrine would assuredly have been put to death as a blasphemer and a heretic. And yet he ought to have been hailed as a benefactor. It is impossible to say of any false belief which mankind have had that it has been the most pernicious in its effects; but we may truly say of the theological notion of the relations of mind and body that it has been surpassed by few false doctrines in the evil which it has worked.

The spirit of metaphysical speculation was scarcely less hostile to physical researches into mental function. For when inquirers had struggled successfully out of mere verbal disputation, and had applied themselves to the observation of mental phenomena, the method used was entirely one-sided; it was a system of mental introspection exclusively, each one looking into his own mind and propounding as philosophy what he thought he observed there; the external observation of mind in all its various manifestations, and of the bodily conditions of all mental action, was ignored. When all knowledge of mental action was gained in this way by observation of self-consciousness, men naturally formed opinions from their own experience which they applied to the mental states of insane persons; feeling that they themselves had a consciousness of right and wrong, and a power of will to do the right and forbear the wrong, they never doubted that madmen had a like clearness of consciousness and a like power of will-that they could, if they would, control their disorderly thoughts and acts. The dungeon, the chain, the whip, and other instruments of punishment were accordingly in constant use as means of coercion; the result being that exhibitions of madness were witnessed which are no longer to be seen, "because they were not the simple product of malady, but of malady aggravated by mismanagement." What with the theological notion of madness as a work of Satan in the individual, and what with the erroneous views of it subsequently begotten of the metaphysical spirit, it came to pass that the barbarous system was abolished only within the memory of men yet living. In sad truth may it be said that, so far as a knowledge of the nature of mental disease and of the proper mode of its treatment is concerned, mankind owe no thanks, but, on the contrary, much error and infinite human suffering, to theology and metaphysics.

It was when men recognized insanity as a disease, which, like other diseases, might be alleviated or cured by medical and moral means—when they regained the standpoint which the ancient Grecians had held—that they began the struggle to free themselves in this matter from the bondage of false theology and mischievous metaphysics. But the emancipation is not yet complete. In many quarters there is the strongest desire evinced, and the most strenuous efforts are made, to exempt from physical researches the highest functions

of mind, and particularly the so-called moral sense and the will: while the old metaphysical spirit still inspires the criterion of responsibility which is sanctioned and acted upon by courts of justice in cases of insanity. If a madman be supposed to know he is doing wrong, or doing that which is contrary to law, when he does some act of violence, he is held to be not less responsible than a sane person. The conclusions reached by the observations of self-consciousness in a sane mind are strictly applied to the phenomena of diseased mind; not otherwise than as if it were solemnly enacted that the disorder and violence of convulsions should be measured by the order and method of voluntary movements, and that whosoever, being seized with convulsions, and knowing that he was convulsed, transgressed that measure, should be punished as a criminal. The unfortunate sufferer, or others on his behalf, might, it is true, innocently argue that the very nature of convulsions excluded the idea of full voluntary control; but the metaphysical intuitionist would rejoin that it was certain from experience that man has a power of control over his movements: that the convulsive movements were a clear proof to all the world that he had not exercised that power; and that his convulsions, therefore, were justly punishable as This pathological comparison is scientifically just, and its justness has oftentimes received terribly striking illustration in the effects of the legal criterion of responsibility; for it is certain that in conformity with it many persons unquestionably insane, who have done homicide, not because they would not, but because they

could not, exercise efficient control, have been, and still from time to time are, executed as simple criminals. Harsh and exaggerated as this statement might seem, there is not, I believe, in this or any other civilized country a physician, practically acquainted with the insane, who would not unhesitatingly endorse it.

No one now-a-days who is engaged in the treatment of mental disease doubts that he has to do with the disordered function of a bodily organ-of the brain. Whatever opinion may be held concerning the essential nature of mind, and its independence of matter, it is admitted on all sides that its manifestations take place through the nervous system, and are affected by the condition of the nervous parts which minister to them. If these are healthy, they are sound; if these are diseased, they are unsound. Insanity is, in fact, disorder of brain producing disorder of mind; or, to define its nature in greater detail, it is a disorder of the supreme nervecentres of the brain-the special organs of mind-producing derangement of thought, feeling, and action, together or separately, of such degree or kind as to incapacitate the individual for the relations of life.\*

The opinion that insanity is a disease of the so-called immaterial part of our nature we may look upon as exploded even in its last retreat. The arguments that have been adduced in favour of it—first, that madness is produced sometimes by moral causes, and, secondly, that it is

<sup>\*</sup> Mind may be defined physiologically as a general term denoting the sum total of those functions of the brain which are known as thought, feeling, and will. By disorder of mind is meant disorder of those functions.

cured sometimes by moral means—are entirely consistent with the theory of material disease, while the arguments in favour of the materialistic theory are quite inconsistent with the spiritualistic hypothesis, which has the further disadvantage of not being within the range of rational human conception.

To the argument that madness is produced sometimes by moral causes, which must be admitted, it is sufficient to reply, first, that long-continued or excessive stimulation of any organ does notably induce physical disease of it, and that in this respect, therefore, the brain only obeys a general law of the organism; and, secondly, that it is possible to produce experimentally, by entirely physical causes, mental derangement exactly similar to that which is produced by moral causes. There are many facts which would justify us in laying it down as a generalization of inductive mental science, that a state of consciousness may be changed experimentally by agents which produce changes in the molecular constitution of those parts of the nervous system which minister to the manifestations of consciousness. Take, for example, the way in which, by the administration of opium or haschisch, we modify in a remarkable manner a person's conceptions of space and time and of other relations. To the second argument in favour of the immaterial nature of unsound mind, which is founded on the distinctly curative influence of moral treatment, the easy reply is, that moral means are beneficial in insanity by yielding repose to parts much needing repose, and by stimulating to activity parts much needing to be active; by yielding repose to

morbid thought and feeling, and by rousing into action healthy thought, feeling, and will.

The aim of the physician in the treatment of insanity is to bring the means at his command to bear, directly or indirectly, on the disordered nerve-element. But, in striving to do this, he soon learns with how many bodily organs and functions he has really to do. To call mind a function of the brain may lead to much misapprehension, if it be thereby supposed that the brain is the only organ which is concerned in the function of mind. There is not an organ in the body which is not in intimate relation with the brain by means of its paths of nervous communication, which has not, so to speak, a special correspondence with it through internuncial fibres, and which does not, therefore, affect more or less plainly and specially its function as an organ of mind. It is not merely that a palpitating heart may cause anxiety and apprehension, or a disordered liver gloomy feelings, but there are good reasons to believe that each organ has its specific influence on the constitution and function of mind; an influence not yet to be set forth scientifically, because it is exerted on that unconscious mental life which is the basis of all that we consciously feel and think. Were the heart of one man to be placed in the body of another it would probably make no difference in the circulation of the blood, but it might make a real difference in the temper of his mind. So close is the physiological sympathy of parts in the commonwealth of the body, that it is necessary in the physiological study of mind to regard it as a function of the whole organism, as comprehending the whole bodily life.

It has been one of the results of the study of morbid mental action to make clear the importance of recognizing the influence of particular organs upon the constitution and function of mind. Pathological instances of perturbation of function have yielded intimations which we should have failed to obtain by observation only of the smooth and regular action of the organism in health; and we can now say with the utmost confidence that although the mind may be studied by the psychological method of observing self-consciousness, it cannot be investigated fully by that method alone. As it was in time past, so in time to come error, confusion, and contradiction must flow from so exclusive and insufficient a method. In consequence of the theological and metaphysical views of mind, and of the way in which it was kept isolated from all other subjects of human inquiry, the phenomena of disordered mental action were, until quite recently, as much neglected by mental philosophers as the insane patients who exhibited them were neglected by those who had the care of them. It seems never to have occurred to metaphysicians that these phenomena could have any bearing on a philosophy of mind; certainly. had it done so, their exclusive method of inquiry would have proved singularly unfit for the observation of them: and it is only recently, since the nature of insanity has been recognized, and the insane have been treated as sufferers from disease, that attempts have been systematically made to use the valuable material which they

furnish for the building up of an inductive mental science. Now, however, it may be laid down as an incontestable axiom, that the physiological method of study is essential to a scientific knowledge of mind, to a real acquaintance with its disorders, and to a successful treatment of them.

Thus much it seemed necessary to say in order to clear the ground, and to define the position which I shall take in the following pages. But there is something more to be said before I go on to the consideration of the special matters which it is the aim of this book to treat of. Man is not, like some of the lower animals, born with the capacity of at once putting into full play his mental functions; on the contrary, a long and patient education is necessary to develop the faculties with which he is endowed; such education being on the physical side, be it noted, a gradual development of the nerve centres which minister to mind and its manifestations. It costs him much practice before he learns to walk and to talk, while to think accurately is so hard a matter that many persons go to their graves without ever having acquired the power of doing so. When injury or disease has destroyed that part of the brain which ministers to the expression of ideas in speech, as in the condition of disease known as aphasia, the person must slowly learn again to talk his own language; he is like a child learning to speak, or like one who is learning to talk a foreign language; he must educate another portion of brain to do the work which the damaged portion can no longer do.

So much in human development being due to education, it is evident that the training which a person · undergoes must have a great influence on the growth of his intellect and the formation of his character. What he shall be and what he shall do will be determined in great measure by what has been done to bring into full activity the capabilities of his nature. But great as is the power of education, it is yet a sternly limited power; it is limited by the capacity of the individual nature, and can only work within this larger or smaller circle of necessity. No training in the world will avail to elicit grapes from thorns or figs from thistles; in like manner, no mortal can transcend his nature; and it will ever be impossible to raise a stable superstructure of intellect and character on bad natural foundations. Education can plainly act only, first, within the conditions imposed by the species, and, secondly, within the conditions imposed by the individual organization: can only, in the former case, determine what is predetermined in the organization of the nervous system and of the bodily machinery in connection with it-cannot, for example, ever teach a man to fly like a bird, or see like an eagle, or run like an antelope; can only again, in the latter case, make actual the potentialities of the individual nature—cannot make a Socrates or a Shakspeare of every being born into the world.

There was a foundation of fact, though not the fact of which he dreamed, in the speculations of the astrologer who believed that by observation of the star in the ascendant at the time of a mortal's birth he might predict his destiny. He was conscious of a fate in human life, but he failed to see that it was the fate made for a man by his inheritance. No power of microscope or chemistry, no power which science can make use of, will enable us to distinguish the human ovum from the ovum of a quadruped; yet it is most certain that the former has inherited in its nature something whereby it developes under suitable conditions into the form of man, and that the latter has in like manner inherited something whereby it developes under suitable conditions into the form of a quadruped.

Not only has the human ovum this destiny of the species in its nature, but each particular ovum has an individual inheritance which makes for it an individual destiny. Men are in much alike, but each individual differs in some respects from any other individual who now exists, or, it may be confidently assumed, ever has existed or ever will exist. And this is not a difference which is due to education or circumstances. but a fundamental difference of nature which neither education nor circumstances can eradicate. Let two persons be placed from birth in the same circumstances and subjected to the same training, they would not in the end have exactly the same pattern and capacity of mind any more than they would have the same pattern of face: each is under the dominion of the natural law of evolution of the antecedents of which he is the cousequent, and could no more become the other than an oak could become an elm if their germs were planted in the same soil, warmed by the same sun, and watered by the same showers: each would display variations which by the operation of natural selection would issue finally in distinct varieties of character. There is a destiny made for a man by his ancestors, and no one can elude, were he able to attempt it, the tyranny of his organization.

The power of hereditary influence in determining an individual's nature, which when plainly stated must needs appear a truism, has been more or less distinctly recognized in all ages. Solomon proclaimed it to be the special merit of a good man that he leaves an inheritance to his children's children; on the other hand, it has been declared that the sins of the father shall be visited upon the children unto the third and fourth generations. Not that the failing of the father shall necessarily show in the children either in the same form or in any recognizable form: it may undergo transformation in the second generation, or may be entirely latent in it, not coming to the surface in any form until the third or fourth generation. But it will run on in the stream of family descent, sometimes appearing on the surface, sometimes hidden beneath it, until, on the one hand, it is either neutralized by the beneficial influences of wise intermarriages, or, on the other hand, reaches a pathological evolution which entails the decay and extinction of the family.

It was a proverb in Israel that when the fathers have eaten sour grapes the children's teeth are set on edge; and it was deemed no marvel that those whose fathers had stoned the prophets should reject Him who was sent unto them—"Ye are the children of those who stoned the prophets." The institution of caste

among the Hindoos appears to have owed its origin to a recognition of the large play of hereditary influence in human development; and that dread, inexorable destiny, which has so great and grand a part in Grecian tragedy, and which Grecian heroes manfully contended against, although fore-knowing that they were inevitably doomed to defeat, was in some degree an embodiment of the deep feeling of the inevitable dependence of a man's present being on his antecedents in the past. "Bless not thyself only," says the author of the Religio Medici, "that thou wert born in Athens; but, among thy multiplied acknowledgments, lift up one hand to heaven, that thou wert born of honest parents, that modesty, humility, and veracity, lay in the same egg, and came into the world with thee. From such foundations thou may'st be happy in a virtuous precocity, and make an early and long walk in goodness; so may'st thou more naturally feel the contrariety of vice unto nature, and resist some by the antidote of thy temper." When we observe what care and thought men give to the selective breeding of horses, cows, and dogs, it is astonishing how little thought they take about the breeding of their own species: perceiving clearly that good or bad qualities in animals pass by hereditary transmission, they act habitually as if the same laws were not applicable to themselves; as if men could be bred well by accident; as if the destiny of each criminal and lunatic were determined, not by the operation of natural laws, but by a special dispensation too high for the reach of human inquiries. When will man learn that he is at the head of nature only by virtue of the

operation of natural laws? When will he learn that by the study of these laws and by deliberate conformity to them he may become the conscious framer of his own destiny?

Notwithstanding that the influence of hereditary antecedents upon the character of the individual has been admitted by all sorts and conditions of men, its important bearing upon moral responsibility has not received the serious consideration which it deserves. Laws are made and enforced on the supposition that all persons who have reached a certain age, arbitrarily fixed as the age of discretion, and are not deprived of their reason, have the capacity to know and obey them; so that when the laws are broken, the punishment inflicted is in proportion to the nature of the offence and not to the actual moral responsibility of the individual. The legislator can know nothing of individuals; he must necessarily assume a uniform standard of mental capacity so far as a knowledge of right and wrong, and of moral power so far as resistance to unlawful impulses, are concerned; exceptions being made of children of tender age and of persons of unsound mind.

There can be no question, however, that this assumption is not in strict accordance with facts, and that there are in reality many persons who, without being actually imbecile or insane, are of lower moral responsibility than the average of mankind; they have been taught the same lessons as the rest of mankind, and have a full theoretical knowledge of them, but they have not really assimilated them; the principles inculcated

never gain that hold of their minds which they gain in a sound and well-constituted nature. After all that can be said, an individual's nature will only assimilate, that is, will only make of the same kind with itself, what is fitted to further its special development, and this it will by a natural affinity find in the conditions of its life. To the end of the chapter of life the man will feel, think, and act according to his kind. The wicked are not wicked by deliberate choice of the advantages of wickedness. which are a delusion, or of the pleasures of wickedness, which are a snare, but by an inclination of their natures which makes the evil good to them and the good evil: that they choose the gratification of a present indulgence, in spite of the chance or certainty of future punishment and suffering, is often a proof not only of a natural affinity for the evil, but of a deficient understanding and a feeble will. The most sober and experienced prison officials are driven sooner or later to a conviction of the hopelessness of reforming habitual criminals. "The sad realities which I have contemplated," says Mr. Chesterton, "compel me to aver that at least nine-tenths of habitual depredators have no desire or intention to forsake their guilty course. They love the vices in which they have revelled. . . . 'Lord, how I do love thieving; if I had thousands I would still be a thief,' I heard a youth exclaim on one occasion." \*

It was the opinion of Plato that the wicked owe their wickedness to their organization and education, so that not they but their parents and instructors should be

<sup>\*</sup> Revelations of Prison Life. By G. L. Chesterton.

blamed; and other eminent philosophers, among whom Hippocrates is included, have maintained that there was no vice but was the fruit of madness. "No man doth sin, but he is possest in some degree; it is good divinity," says the learned Casaubon.\* To uphold such a doctrine now-a-days would be thought a perilous thing to society, as removing from the wicked man the salutary fear of the penal consequences of his actions, which operates to turn him from his wickedness and to make him do that which is lawful and right. And yet, if the matter be considered deeply, it may appear that it would, perhaps, in the end make little difference whether the offender were sentenced in anger and sent to the seclusion of prison, or were sentenced more in sorrow than in anger, and consigned to the same sort of seclusion under the name of an asylum. The change would probably not lead either to an increase or to a decrease in the number of crimes committed in a year.

It will be said, however, that if crime were considered to be the fruit of madness, it would be wrong to punish an offender at all; he ought rather to be pitied and kindly cared for. But do we not in reality punish insanity, however little we may wish to do so? The measures which are necessarily adopted for the proper care of the insane and for the protection of others are a punishment. It is a punishment, or at any rate it is the infliction of what they for the most

<sup>\*</sup> A Treatise concerning Enthusiasme, as it is an Effect of Nature; but is mistaken by many for either Divine Inspiration or Diabolical Possession. By Meric Casaubon, D.D.

part regard as grievous suffering, to deprive them of liberty by confining them in asylums and to subject them to the discipline of such establishments. Moreover, it is unquestionably the best treatment to induce an insane person to work if he is fit to work, and there can be little doubt that there would be more recoveries from insanity than there are in our asylums if more work could be systematically enforced in them. Indeed, it is not improbable that the old, harsh and inhumane system of treating the insane was effectual in bringing back to their senses some few who, under the modern indulgent system, have no motives excited in their minds sufficiently powerful to induce them to make those efforts at self-control which are often the beginning of recovery. In like manner, though the criminal might be compassionated, it would still be necessary to deprive him of the power of doing further mischief; society has clearly the right to insist on that being done; and though he might be kindly cared for, the truest kindness to him and others would still be the enforcement of that kind of discipline which was best fitted to bring him, if possible, to a healthy state of mind, even if it were hard labour within the measure of his strength. If we are satisfied that our prison-system is the best that can be devised for the prevention of crime and the reformation of the criminal, we may rest satisfied that it is the best treatment for the sort of insanity from which criminals suffer. No fear therefore of the practical ill consequences to society need deter us from looking on criminals as the unfortunate victims of a vicious organization and a bad

education. But what in this age it would seem right that we should do, is to get rid of the angry feeling of retaliation which may be at the bottom of any judicial punishment, and of all penal measures that may be inspired by such feeling. Society having manufactured its criminals has scarcely the right, even if it were wise for its own sake, to treat them in an angry spirit of vengeance.

Not until comparatively lately has much attention been given to the way in which criminals are produced. It was with them much as it was at one time with lunatics: to say of the former that they were wicked, and of the latter that they were mad, was thought to render any further explanation unnecessary and any further inquiry superfluous. It is certain, however, that lunatics and criminals are as much manufactured articles as are steamengines and calico-printing machines, only the processes of the organic manufactory are so complex that we are not able to follow them. They are neither accidents nor anomalies in the universe, but come by law and testify to causality; and it is the business of science to find out what the causes are and by what laws they work. There is nothing accidental, nothing supernatural, in the impulse to do right or in the impulse to do wrong; both come by inheritance or by education; and science can no more rest content with the explanation which attributes one to the grace of Heaven and the other to the malice of the devil, than it could rest content with the explanation of insanity as a possession by the devil.

The few and imperfect investigations of the personal

and family histories of criminals which have yet been made are sufficient to excite some serious reflections. One fact which is brought strongly out by these inquiries is that crime is often hereditary; that just as a man may inherit the stamp of the bodily features and characters of his parents, so he may also inherit the impress of their evil passions and propensities: of the true thief as of the true poet it may be indeed said that he is born. not made. This is what observation of the phenomena of hereditary action would lead us to expect; and although certain theologians, who are prone to square the order of nature to their notions of what it should be, may repel such a doctrine as the heritage of an immoral in place of a moral sense, they will in the end find it impossible in this matter, as they have done in other matters. to contend against facts. To add to their misfortunes. many criminals are not only begotten, and conceived, and bred in crime, but they are instructed in it from their youth upwards, so that their original criminal instincts acquire a power which no subsequent efforts to produce reformation will ever counteract.

All persons who have made criminals their study, recognize a distinct criminal class of beings, who herd together in our large cities in a thieves' quarter, giving themselves up to intemperance, rioting in debauchery, without regard to marriage ties or the bars of consanguinity, and propagating a criminal population of degenerate beings. For it is furthermore a matter of observation that this criminal class constitutes a degenerate or morbid variety of mankind, marked by

peculiar low physical and mental characteristics. They are, it has been said, as distinctly marked off from the honest and well-bred operatives as "black-faced sheep are from other breeds," so that an experienced detective officer or prison official could pick them out from any promiscuous assembly at church or market.\* Their family likeness betrays them as fellows "by the hand of nature marked, quoted and signed to do a deed of shame." They are scrofulous, not seldom deformed, with badly-formed angular heads; are stupid, sullen, sluggish, deficient in vital energy, and sometimes afflicted with epilepsy. As a class, they are of mean and defective intellect, though excessively cunning, and not a few of them are weak-minded and imbecile.† The women are ugly in features, and without grace of expression or movement. The children, who become juvenile criminals, do not evince the educational aptitude of the higher industrial classes: they are deficient in the power of attention and application, have bad memories, and make slow progress in learning; many of them are weak in mind and body, and some of them actually imbecile. Mr. Bruce Thomson,

<sup>\*</sup> The Hereditary Nature of Crime. By J. B. Thomson. Journal of Mental Science, vol. xv., p. 487.

<sup>†</sup> The mendicant thiefs are well known to prison officials as a class of persons of weak intellect, who tramp through the country, prowling about the different houses, and begging or stealing as the opportunity offers; and it is by them that arson, rape, and other crimes are often perpetrated. In the country of Cumberland, a few years ago, the practice of committing them to prison as soon as they crossed the border was enforced. The direct result was a considerable increase in the number of admissions into the country asylum, to which they were transferred from gaol as being persons of imbecile or unsound mind.

who in his official capacity as surgeon to the General Prison of Scotland had observed thousands of prisoners. declared that he had not known one to exhibit any æsthetic talent; he had never seen a pen-sketch, a clever poem, or an ingenious contrivance produced by one of them.\* Habitual criminals are, he says, without moral sense—are true moral imbeciles; their moral insensibility is such that in the presence of temptation they have no self-control against crime; and among all the murderers he had known, amounting to nearly five hundred, only three could be ascertained to have expressed any remorse. He quotes among other testimonies to a like effect the opinion of a medical friend, a shrewd observer of men, much conversant with lunacy, and having had a long experience among prisoners, who declared himself mainly impressed with their extreme deficiency or perversion of moral feeling, the strength of the evil propensities of their natures and their utter impracticability. "In all my experience I have never seen such an accumulation of morbid appearances as I witness in the post mortem examinations of the prisoners who die here. Scarcely one of them can be said to die of one disease, for almost every organ of the body is more or less diseased; and the wonder to me is that life could have been supported in such a diseased frame. Their moral nature seems equally diseased with their physical frame; and whilst their mode of life in prison reanimates their physical health, I doubt whether their minds are equally benefited, if

<sup>\*</sup> In this, however, his experience must have been singular; for other prison officers have not observed these deficiencies.

improved at all. On a close acquaintance with criminals, of eighteen years' standing, I consider that nine in ten are of inferior intellect, but that all are excessively cunning."\*

We may accept then the authority of those who have studied criminals, that there is a class of them marked by defective physical and mental organization, one result of their natural defect, which really determines their destiny in life, being an extreme deficiency or complete absence of moral sense. In addition to the perversion or entire absence of moral sense, which experience of habitual criminals brings prominently out, other important facts disclosed by the investigation of their family histories are, that a considerable proportion of them are weak-minded or epileptic or become insane, or that they spring from families in which insanity, epilepsy, or some other neurosis exists, and that the diseases from which they suffer and of which they die are chiefly tubercular diseases and diseases of the nervous system. Crime is a sort of outlet in which their unsound tendencies are discharged; they would go mad if they were not criminals, and they do not go mad because they are criminals.

Crime is not then in all cases a simple affair of yielding to an evil impulse or a vicious passion, which might be checked were ordinary control exercised; it

<sup>\* &</sup>quot;As in all families or races where physical degeneration is found, so among the criminal class we have very often abnormal states—such as spinal deformities, stammering, imperfect organs of speech, club-foot, cleft-palate, hare-lip, deafness, eongenital blindness, paralysis, epilepsy, and scrofula. These usually accompany congenital weakness of mind."—Mr. Bruce Thomson, loc. cit.

is clearly sometimes the result of an actual neurosis which has close relations of nature and descent to other neuroses, especially the epileptic and the insane neuroses; and this neurosis is the physical result of physiological laws of production and evolution. No wonder that the criminal psychosis, which is the mental side of the neurosis, is for the most part an intractable malady, punishment being of no avail to produce a permanent reformation. The dog returns to its vomit and the sow to its wallowing in the mire. A true reformation would be the re-forming of the individual nature; and how can that which has been forming through generations be re-formed within the term of a single life? Can the Ethiopian change his skin or the leopard his spots?

Thus then when we take the most decided forms of human wrong-doing, and examine the causes and nature of the moral degeneracy which they evince, we find that they are not merely subjects for the moral philosopher and the preacher, but that they rightly come within the scope of positive scientific research. The metaphysical notion of man as an abstract being endowed with a certain fixed moral potentiality to do the right and eschew the wrong, is as little applicable to each human being born into the world as the notion of a certain fixed intellectual power would be applicable to each being, whether of good mental capacity, imbecile or idiot. There are, as natural phenomena, manifold gradations of understanding from the highest intellect to the lowest idiocy, and there are also, as natural phenomena, various

degrees of moral power between the highest energy of a well-fashioned will and the complete absence of moral sense. Nor are intellect and moral power so dependent mutually as necessarily to vary together, the one increasing and decreasing as the other increases and decreases: experience proves conclusively that there may be much intellect with little morality and much morality with little intellect.

There is a borderland between crime and insanity, near one boundary of which we meet with something of madness but more of sin, and near the other boundary of which something of sin but more of madness. just estimate of the moral responsibility of the unhappy people inhabiting this borderland will assuredly not be made until we get rid of the metaphysical measure of responsibility as well as of the theological notion that vices and crimes are due to the instigation of the devil, and proceed by way of observation and induction to sound generalizations concerning the origin of the moral sentiments, the laws of their development, and the causes, course and varieties of moral degeneracy. Here as in other departments of nature our aim should be the discovery of natural laws by patient interrogation of nature, not the invention of theories by invoking our own minds to utter oracles to us. It must be received as a scientific axiom that there is no study to which the inductive method of research is not applicable; every attempt to prohibit such research by authority of any kind must be withstood and repelled with the utmost energy as a deadly attack upon the fundamental principle of scientific

inquiry. With a better knowledge of crime, we may not come to the practice of treating criminals as we now treat insane persons, but it is probable that we shall come to other and more tolerant sentiments, and that a less hostile feeling towards them, derived from a better knowledge of defective organization, will beget an indulgence at any rate towards all doubtful cases inhabiting the borderland between insanity and crime; in like manner as within living memory the feelings of mankind with regard to the insane have been entirely revolutionized by an inductive method of study.

There are advantages in recognizing a just principle even when events are not ripe enough for its application, when it looks Utopian and excites the derision of practical men; for it slowly modifies feelings and ideas, acts as a solvent of prejudices, and, notwithstanding seemingly insuperable difficulties, tends by hardly perceptible degrees to its realization in action. The sincere recognition of it is, as it were, a prophecy which finally brings about its own fulfilment: the Utopian idea of one age becoming often the common-place idea of a succeeding age.

## NOTE.

The following account is quoted by Casaubon in his Treatise concerning Enthusiasm from Josephus Acosta. I append it as a striking illustration of the way in which madness was sometimes innocently dealt with in the days of Acosta:—"There was (saith Acosta) in this very Kingdome of Peru (where himself was once Præpositus Generalis), a man of great esteem in those dayes, a learned Divine and Professor (or Doctor) of Divinity. The same also accounted religious and orthodox: yea in a manner, the oracle, for his time, of this other world (America). This man being grown familiar with a certain muliercula (or, plain woman), which as another Philumena or Maximilla that Montanus carried about,

boasted of her self, that she was taught by an Angel certain great mysteries; and would also fall (or feign it at least) into trances and raptures, which carried her quite beside herself: he was at last so bewitched and captivated by her, that he did not stick to referre unto her concerning highest points of Divinity: entertain her answers, as oracles; blaze her abroad, as a woman full of revelations, and very dear unto God: though in very deed a woman, as of mean fortune, so of as mean a capacitie otherwise, except it were to forge lics. This woman then, whether really possest of the Devil, which is most likely, because of those ecstasies; or whether she acted it with art aud cunning, as some learned men suspected; because she told him strange things concerning himself, that should come to passe, which his phansic, made yet greater: he did certainly the more willingly apply himself unto her, to be her disciple, whose ghostly Father he had been before. To be short; he came at last to that, that he would take upon himself to do miracles, and did verily think that he did, when in very deed there was no ground at all for any such thought. For which, and for certain propositions contrary to the Faith, he had received from his Prophetesse. he was at last, by order of the Judges of the holy Inquisition, to the great astonishmeut of this whole kingdome, apprehended, and put in prison: where for the space of five years he was heard, tolcrated, examined, until at last his incomparable pride and madnesse was made known unto all men. For whereas he pretended with all possible confidence and pertinacity, that he had a private angel, of whom he learned whatsoever he desired; yea that he had been intimate with God Himself, and conferred with him personally; he would utter such fopperies as none would believe could proceed from any that were not stark mad: vet in very truth, the man was in perfect sense, as to soundnesse of brain; as perfect as I myself can think myself, at this time now writing Very sadly and soberly therefore he would affirm, that he should be a King: yea, and Pope too; the Apostolical See being translated to those parts: as also that holinesse was granted unto him above all angels, and heavenly hosts, and above all apostles: yea that God had made profer unto him of hypostatical union, but that he refused to accept of it. Moreover, that he was appointed to be Redeemer of the world, as to matter of efficacy: which Christ, he said, had been no further then to sufficiency only. That all ecclesiastical estate was to be abrogated; and that he would make new laws, plain and easie, by which the Cœlibatus (or restraint of marriage) of Clergie-men should be taken away, multitude of wives allowed, and all necessity of confession evoided. These things, and other things of that nature he would affirme with such earnest confidence, as we were all amazed, that any

NOTE. 37

man could be in his right wits that held such opinions. In fine, after the examination of his actions, and heretical propositions, to the number of a hundred and ten and upwards, either heretical all, or at least not agreeable to the sound doctrine of the Church: as the manner of that High Court is, we were appointed to dispute with him, if possibly we might reduce him to sobriety. We were three in all, besides the Bishop of Quinto, that met before the Judges about it. The man being brought in, did plead his cause with that liberty and eloquence of speech, that I stand amazed to this day, that mere pride should bring a man unto this. He acknowledged that his Doctrine, because above all humane reason, could not be proved but by Scripture and Miracles. As for Scripture; that he had proved the truth of it by testimonies taken from thence, more clear and more pregnant than ever Paul had proved Jesus Christ to be the true Messias by. As for miracles : that he had done so many and so great, that the Resurrection of Christ itself was not a greater For that he had been dead verily and truly, and was risen again; and that the truth of it had been made apparent unto all. All this while, though he had never a book in the prison, so that even his Breviary was taken away from him, he did quote places of Scripture out of the Prophets, the Apocalyps, the Psalms, and other books, so many and so long, that his very memory caused great admiratiou. But these places he did so apply to his phansies, and did so allegorize them, that any that heard him must needs either weep or laugh. But lastly, if we did yet require miracles, that he was ready to be tried by them. And this he spake as either certainly mad himself, or accounting us all mad. For that by revelation it was come to his knowledge, he said, that the Serenissimus John of Austria was vanquished by the Turks upon the seas: that Philip the most puissant king of Spain, had lost most part of his kingdom: that a Council was held at Rome, about the deposition of Pope Gregory, and another to be chosen in his place. That he told us these things, whereof we had had certain intelligence, because we might be sure that they could not be known unto himself, but by immediate divine revelation. All which things, though they were so false that nothing could be more, yet still were they affirmed by him, as certainly known unto us. But at last, having disputed with him two dayes to no effect at all, being led out with some others (as the fashion is in Spain) to be made a publick Spectacle; he ceased not to look up to Heaven, expecting (as it seems the Devil had promised him,) that fire would come to consume both Inquisitors and spectators all. But in very deed, no such fire came from above; but a flame came from below, which seized upon this pretended King, and Pope, and Redeemer, and new Law-giver, and quickly did reduce him into ashes."

## CHAPTER II.

## THE BORDERLAND.

No distinct line of demarcation between sanity and insanity—Continuity in nature—The borderland—The insane temperament—Transformation of nervous diseases—Kinship between insanity and epilepsy, neuralgia, chorea, dipsomania—Functional and organic diseases of the brain—Hereditary predisposition: its pathological evolution through generations—Originalities of idea, feeling and impulse in connection with it—Insanity and the prophetic mania—The prophets of the Old Testament—The epileptic nature of Mahomet's visions and revelations—The madman and the reformer—Eccentricity and insanity—Deficiency or absence of moral sense a congenital fault of mental organization—Crime and insanity—Moral sense: its acquisition in the course of evolution; and its dependence upon organization—Physical conditions of moral degeneracy—Conclusions.

It would certainly be vastly convenient, and would save a world of trouble, if it were possible to draw a hard and fast line, and to declare that all persons who were on one side of it must be sane and all persons who were on the other side of it must be insane. But a very little consideration will show how vain it is to attempt to make such a division. That nature makes no leaps, but passes from one complexion to its opposite by gradations so gentle that one shades imperceptibly into another, and no one can fix positively the point of transition, is a sufficiently trite observation. Nowhere is this more true than in respect of sanity and insanity; it is unavoidable therefore that doubts, disputes

and perplexities should arise in dealing with particular cases.

The matter is made worse by the strong tendency which there is in the human mind to believe that there are actual divisions in nature corresponding with the more or less arbitrary divisions which are necessarily made in the acquisition and classification of knowledge; whence comes either an aversion, conscious or unconscious, to admit frankly the existence of intermediate instances which cannot be duly marshalled in distinct classes, or a disposition so to exaggerate resemblances and to overlook differences as to force the rebellious instances into one class or another. It is vain, however, to shut our eyes to facts, however inconvenient they may be to our systems of classification; and, in very truth, these cases that will not be classified, these intermediate steps, are often of excellent use, if rightly appreciated, in breaking down the barriers of artificial distinctions and bridging the gaps between them. Opinions that might seem almost as opposite as heaven and hell, and for which men fight unto death, have really a bridge of connection, though it may be a bridge of many arches, which their furious defenders fail to see. It would be no exaggeration to declare that there is so much in common between a most virtuous and a most vicious man as would render it impossible to attain to a scientific understanding of the nature of the one without a scientific understanding of the nature of the other. In the formation and verification of our generalizations it is almost as incumbent upon us to look carefully to the intermediate instances between two classes as it is not to overlook opposing instances.

It is of great importance then to recognise a borderland between sanity and insanity, and of greater importance still, not resting content with a mere theoretical recognition of it, to study carefully the doubtful cases with which it is peopled. The bearing of such study on our opinions, though at first it may seem to be to confound well-established distinctions, and to make uncertain what before seemed certain, cannot fail in the end to be most beneficial. Assuredly it is a fact of. experience that there are many persons who, without being insane, exhibit peculiarities of thought, feeling and character which render them unlike ordinary beings and make them objects of remark among their fellows. They may or may not ever become actually insane, but they spring from families in which insanity or other nervous disease exists, and they bear in their temperament the marks of their peculiar heritage: they have in fact a distinct neurotic temperament—a certain neurosis, and some of them a more specially insane temperament—an insane neurosis.

We are, it is true, yet without any exact knowledge of the ways of hereditary action, but there can be no doubt of the general fact that individuals do sometimes inherit a positive tendency to a particular nervous disease from which one or other of their parents or ancestors has suffered. The son of an insane person carries in his organization a distinctly greater liability to an outbreak of insanity under the ordinary conditions of life

than the son of perfectly sane parents; in saying that he has a hereditary predisposition to insanity we express this fact which is attested by general experience. Another fact of observation is that the offspring of persons who have suffered from some nervous disease frequently inherit a liability to the attack of some other nervous disease than that which has given them their neurotic heritage: there is a kinship between nervous diseases by virtue of which it comes to pass that they undergo transformation through generations.

The two diseases most closely related in this way are insanity and epilepsy; the descendant of an epileptic parent being almost if not quite as likely to become insane as to become epileptic, and one or other of the descendants of an insane parent not unfrequently suffering from epilepsy. In like manner neuralgia in the parent may manifest itself in the offspring in the form of a tendency to insanity, and every experienced physician knows that if he meets in practice with a case of violent neuralgia, which occurs from time to time in an obscure way, without any discoverable morbid cause, he may predicate the existence of insanity in the family with almost as great confidence as if the patient were actually insane. How it is we know not, but so it is that a certain form of neuralgia owes its origin mainly to a neurotic inheritance.

Chorea, again, which has been described fancifully as "an insanity of the muscles," is a nervous disease which exhibits sometimes a close relation of descent to insanity or epilepsy; and in children descended from families in which there has been much insanity we meet occasionally with diseased phenomena that seem to be hybrids between chorea and epilepsy, or between chorea and insanity, and which pass finally into one of these more definite ruts of convulsive action. It may be remarked here by the way that in calling epilepsy and chorea convulsive diseases, what we mean is, that they are diseases in which the nerve centres that preside over movements, being deranged, have lost that co-ordination and subordination which are manifest in their healthy functions, and display irregular, perverted and violent action.

In like manner insanity might truly be described as a chorea or convulsive disease of the mind, the derangement being in nerve centres whose functions are not motor but mental, and whose derangements therefore display themselves in convulsions not of the muscles but of mind. Hence it is that instances occasionally present themselves in which the disorder is transferred suddenly from one set of nerve centres to another, the old symptoms ceasing and quite a new order of symptoms supervening. Thus, a severe neuralgia disappears and the patient is attacked with some form of madness, the morbid conditions of perverted function having been transferred from the sensory centres to the mind centres; when the madness has passed away the neuralgia may return. Again, convulsions cease and insanity occurs, the transference being from the motor centres to the mind centres; or, conversely, the appearance of convulsions may be the determination of an attack of insanity. Instances like these indicate that the kind of morbid change which is the physical condition of deranged function in the sensory and motor nerve centres is similar to that which is the condition of morbid function in the mind centres; however that may be, they certainly warrant the conclusion that disease of mind is a derangement which is nowise metaphysical, but one strictly comparable with such other nervous disorders as neuralgia and convulsions. If we once for all clearly realize this just pathological conception of the nature of mental derangement, it will deliver us from a multitude of vain speculations, and we shall find it of essential use in our endeavours to arrive at correct opinions with regard to the responsibility of insane persons.

There is another degenerate condition, if it be not actual disease, which has close relation to insanity, either as cause or effect--namely, dipsomania. A host of facts might be brought forward to prove that drunkenness in parents, especially that form of drunkenness known as dipsomania, which breaks out from time to time in uncontrollable paroxysms, is a cause of idiocy, suicide or insanity in their offspring. It would seem to be truly a nervous disease, a kind of insanity; in its outbreaks it displays the periodicity which is a common character of nervous diseases; and it exhibits its close kinship to insanity not only by the fact that when occurring in one generation it may become the occasion of mental derangement or suicide in the next generation, but conversely by the fact that insanity in the parent may occasion dipsomania in the offspring.

In pointing out the relations between mental and other nervous diseases. I have noticed instances of so-called functional diseases only, that is, diseases in which after death we fail to find, by the means of investigation which we have at our command, any actual morbid changes. Not that physical changes do not presumably exist in the intimate elements of structure to which our senses have not yet gained access: we believe confidently that as by means of the spectroscope we have discovered facts which, before its invention, were quite beyond our ken; or as by means of the telescope we have discovered stars which, without its help, would have remained unknown to us; so the time will come when by the invention of improved instruments of research the insensible movements of molecules will be as open to observation as are the molar movements of the heavens, and when those that come after us will not fail to discover the physical causes of derangements which we are now constrained to call functional.

It is with so-called functional diseases, such as epilepsy, chorea, neuralgia, that insanity displays the most marked relationship, not with *organic* diseases such as apoplexy and softening of the brain, in which we are able to detect visible deterioration of the structure of the nerve centres. The reason of this probably is that while the functional diseases are strictly and essentially nervous, the organic diseases are rather due primarily to disease of other tissues. Apoplexy, for example, is caused by degeneration of the walls of the blood-vessels, and consequent rupture of them, is, as it were, an inundation

of the adjacent territory through the giving way of the banks of the stream, the destruction of nerve-structure being secondary to the effusion of blood. Softening of the brain again is probably owing to defective nutrition as much as to any inherent weakness of nerve element. Certain it is that those morbid changes, whatever they are, in the intimate elements of the nervous system, which are the conditions of mental derangement, are much more closely allied to the similarly obscure morbid conditions of epilepsy, neuralgia, and chorea, than they are to the visible and palpable injury of structure which we meet with in the so-called organic diseases.

It is hardly necessary to point out that those who inherit a tendency or predisposition to insanity are, other things being equal, less favourably placed in the struggle of life than those who are free from such tendency; their nervous centres are less stable, and more likely therefore to fall into derangement of function; and when the equilibrium of them has been disturbed, they do not, like perfectly soundly constituted centres, return easily after a short time to their old equilibrium, but are apt to find a more stable equilibrium in degenerate function; just as in the breaking up of highly complex organic compounds the components fall readily into more simple and stable combinations, until the human body, as it goes through the successive stages of putrefaction, is reduced at last to carbonic acid, water and ammenia. Not all the maxims of all the philosophies nor all the lessons of all the religions which the world has seen, will annihilate this physical impulse, though they may succeed in some instances in counteracting it.

There are of course many degrees of hereditary predisposition: in some persons it is so slight that no one would suspect its existence, while others carry the sure marks of it in their countenance, manner and conversation, presenting peculiarities sufficiently characteristic to justify the description of them under the name of the insane temperament or the insane neurosis. Not that every member of a family in which there is nervous or mental disease presents the insane temperament; on the contrary, some persons who have had an insane father or mother do not exhibit any marked mental or bodily peculiarities. But although the hereditary neurosis does not display itself in them, it may still be there latent or dormant, not dead but sleeping, and may appear in a decided form in the next generation. The more closely we study mental derangements and their causation, the more clearly we perceive the influence of hereditary peculiarities, even though these may seem to be of a trivial kind, in the production of more marked neuropathic states in the offspring. can possibly have been the cause?" is the question again and again asked of the physician by an anxious father or mother, who all the while carries in his physiognomy, gestures, or habits of thought and feeling the unmistakeable evidence of the cause. Were the physician to answer briefly and sincerely, the honest reply would be-"A pathological evolution of your nature."

When the insane temperament has been developed in

its most marked form, we must acknowledge that the hereditary predisposition has assumed the character of deterioration of race, and that the individual represents the beginning of a degeneracy which, if not checked by favourable circumstances, will go on increasing from generation to generation and end finally in the extreme degeneracy of idiocy. With the occurrence of idiocy there is happily the extinction of the degenerate variety, for with it come impotence and sterility. Beneath and beyond the little span of nature which lies within the reach of our faculties, with which our senses bring us into relation, there is a power which inspires evolution on earth, taking good care that its work is done, no matter at what cost in time, in prodigality of life, in individual suffering, animal or human.

Let it be observed now that in its less marked forms the insane neurosis is by no means the unmixed evil which it might on a superficial consideration appear to be. When we look into the matter it is truly remarkable how much mankind has been indebted for its originating impulses and for special displays of talent, if not of genius, to individuals who themselves or whose parents have sprung from families in which there has been some predisposition to insanity. Such persons are apt to seize on and pursue the bypaths of thought which have been overlooked by more stable intellects, and so, by throwing a side light upon things, to discover unthought of relations. One observes this tendency of mind even in those of them who have no particular genius or talent; for they have a novel way of looking at things, do not run in the

common groove of action or follow the ordinary routine of thought and feeling, but discover in their remarks a certain originality and perhaps singularity, sometimes at a very early period of life. This is illustrated now and then by a remarkable aptitude for punning and by strange quirks and cranks of fancy, such as a person not so peculiarly gifted might die before he could invent. Notable again is the emancipated way in which some of them discuss, as if they were problems of mechanics, objects or events round which the associations of ideas and feelings have thrown a glamour of conventional sentiment. regard to most beliefs they are usually more or less heterodox or heretical, though often not constant, being apt to swing round suddenly from one point to a quite opposite point of the compass of belief. It is a fact too that they frequently display remarkable æsthetic feeling and special artistic talents and aptitudes. An intensity of feeling and energy characterizes them: inspired with strong faith in the opinions which they adopt, they exhibit much zeal and energy in the propagation of them, and so become useful as reformers; they are possessed with a degree of fanaticism which bears them on to their end, reckless of the most formidable obstacles.

A person of large, calm and deep intellect, looking to the history of human development through the ages, and from what point it started; estimating the value of beliefs; contrasting the faiths of to-day with the faiths of the far distant past; reflecting how different probably will be the faiths of the most distant future to which imagination can reach; and considering with the preacher the uncertain end of all the labour wherewith man labours under the sun; -is not likely to be strongly moved to destroy vigorously what seems error, or strongly urged to propagate zealously what seems truth, is likely rather, like Pilate, not jestingly, but in a cold spirit of philosophy, to ask "What is truth?" and amidst the turmoil of hotheaded partizans to sit, like Gallio, caring for none of these things. A narrowness and intensity of conviction, something of the same sort as the faith of a monomaniac in his particular revelation, and a fanatical zeal of action are necessary to constitute the reformer. And in very truth it will be found that many of the great reforms of thought and action have been initiated by persons either sprung from insane families, or some of whom might themselves have been thought insane. They present what in our ignorance we are constrained to call accidental variations of mental structure and function, which may, according to circumstances, either perish or initiate new lines of evolution. They have had the necessary zeal, and they have had also the impulse of originality, which is a sort of inspiration, for it cannot be acquired by reflection; whence probably has arisen the superstitious notion, which has prevailed in certain countries, that the insane were divinely inspired. They were cracked, but, as it has been remarked, the crack let in light.

It was because in olden times madness was identified with the prophetical mania, and believed to be of supernatural origin, that the belief in the inspiration of the insane was entertained. This was the case among eastern nations, and even among the ancient Greeks madness,

like epilepsy, was accounted a sacred disease. Hence the word mania was used to mean both madness and the prophetic spirit: "the greatest blessings we have spring from madness, when granted by the Divine bounty," Plato represents Socrates as saving. "For the prophetess at Delphi and the priestesses at Dodona have, when mad, done many and noble services for Greece, both privately and publicly; but in their sober senses little or nothing." It was as considering it noble when it happens by Divine decree, that they gave it this name; but the men of the present day, by ignorantly inserting the letter τ, have called it the prophetic art.\* Thus madness is identified with Divine inspiration, and the madman in this sense "is found fault with by the multitude as out of his senses: but it escapes the notice of the multitude that he is inspired." He is in fact in a higher and more exalted state of mind than that of a person in his sober senses, the result being not an increased power of calm and sustained thought, but brilliant flashes of wonderful insight. At the same time Plato distinguishes from this higher sort of mania the madness which proceeded from evil states of the body and the mind—the madness of folly, ignorance and insanity. There was the mania or madness belonging to the prophetic spirit, and there was the mania or

<sup>\*</sup> Μανία, madness—μανική, the mad art—μαντική, the prophetic art. On this subject I may refer to the Rev. Augustus Clissold's work on "The Prophetic Spirit in its relation to Wisdom and Madness," from which I have taken these quotations. Mr. Clissold points out what he considers to be the inconsistency of those who accept the divine origin of the visions of the prophets of the Old Testament, and at the same time reject Swedenborg's visions and repudiate his prophetic claims.

madness of disease, running at times so close to one another as not to be distinguishable.

The prophets of the Old Testament, speaking as they probably did, in an impassioned manner, and with vehement gesticulation, as though possessed by a spirit which they could not resist, were looked upon as raving madmen. "Wherefore came this mad fellow unto thee?" is asked of Jehu. And Shemaiah writes a letter declaring that the prophet Jeremiah is mad, and ought to be put in prison—(Jeremiah xxix., 26; Isaiah lix., 15). Then, as sometimes now, it was true: "Yea truth faileth; and he that departeth from evil is accounted mad." Of Christ himself it was afterwards said-"He is beside himself." "He hath a devil and is mad, -why hear ye him?" Paul Festus exclaimed—"Paul, thou art beside thyself; much learning doth make thee mad." It is plain then that there has always been something in common recognised between the mental state of the inspired genius or prophet, and the mental state of the madman, whence it has come to pass that the terms mania and alienation of mind have been used to designate both states. There was an alienation of mind which was the result of divine inspiration, in which the mind was in an exalted state, and there was an alienation of mind which was the result of disease—a mania which was divine inspiration, and a mania which was properly madness or possession by an evil spirit. Possessed by a good spirit, the individual was a prophet; possessed by an evil spirit, he was a madman. Nor was it always easy to distinguish one state from the other, some of the prophets of the Old Testament, for

example, presenting symptoms which can hardly be interpreted as other than the effects of madness; certainly, if they were not mad, they imitated very closely some of its most striking features.\*

Some may, perhaps, think it outrageous and absurd to suppose that any good or great event could proceed from a source contaminated by delusion or insanity; but not to take other illustrations, let any one who is inclined to be of that opinion consider the rise and progress of Mahometanism. There can be little, if any, doubt in the minds of those who do not subscribe to that faith, that an epileptic seizure was the occasion of Mahomet's first vision and

\* Jeremiah, under the influence of the prophetic spirit, procures a linen girdle and puts it round his loins. He then takes a long journey to the Euphrates to hide it there in the hole of a rock, returns, and again, after many days, takes another long journey to the same place to take the girdle again out of the hole, when he finds it had begun to get rotten, and to be good for nothing. Ezekiel takes a tile, and portrays upon it the city of Jerusalem; then he lays siege to this city on the tile, builds a fort against it, and casts a mount against it, and sets a camp against it, and battering rams against it round about it; then he takes an iron pan, and sets it for a wall of iron between himself and the city, and lays siege to the pan, as he had done to the tile; and for a long time lies upon his left side before the tile, and then upon his right: he eats from time to time barley cakes which he had baked with cow's dung. The first command had been, "Thou shalt bake it with dung that cometh out of man;" but, in consequence of his protest, it was said, "Lo, I have given thee cow's dung for mau's dung, and thou shalt prepare thy bread therewith." On another occasion he removes his household goods in the twilight by digging a hole through the wall of his house with his own hand, and carrying away some of his furniture on his own shoulders in the sight of some of the Jews, who came to see the strange things he was doing. Isaiah loosed the sackcloth from his loins, put off his shoes from off his feet, stripped himself naked, and for a time walked naked and barefoot, under the influence of the prophetic spirit. Hosea declared that he was commanded to take a wife of whoredom; and accordingly did so.

revelation, and that, deceived or deceiving, he made advantage of his distemper to beget himself the reputation of a divine authority. The character of his visions was exactly of that kind which medical experience shows to be natural to epilepsy; similar visions which are believed in as realities and truths by those who have them occurring not unfrequently to epileptic patients confined in asylums. For my part I would as soon believe there was deception in the trance which converted Saul the persecutor into Paul the Apostle as believe that Mahomet at first doubted the reality of the events which he saw in his vision. But when we consider seriously what has come of these epileptic visions and ecstasies, we may well pause before venturing to declare what may or may not come of madness or allied conditions, and be cautious how we give credit to revelations which transcend the reach of our rational faculties. It will not be necessary for the Mahometan to reject the good which there may be in the teachings of Mahomet because he is constrained to reject the supernatural authority on which they were based.

The observed resemblance between prophetic inspiration and mania, which has been the occasion of the same name being applied to both, is a fact of no little interest in relation to what has been said of the insane temperament and of the family antecedents of some of those who have given birth to new ideas or have initiated great reforms in the world. The insane person is in a minority of one in his opinions, and so at first is the reformer, the difference being that the reformer's belief is an advance upon the received system of thought and so in time gets

acceptance, while the belief of the former being opposed to the common sense of mankind gains not acceptance, but dies out with its possessor or with the few foolish persons whom it has perchance infected. But it has happened again and again in the world that opinions which seemed absurd to the common sense of mankind. and which were therefore accounted madness, have turned out to be true. The novel mode of looking at things, which is characteristic of the insane temperament, may be an intuitive insight, a sort of inspiration, which laboured reflection could never attain unto; it is the very opposite in action to that bond of habit which enthrals the mental life of the majority of mankind. The power of stepping out of the beaten track of thought, of bursting by a happy inspiration through the bonds of habit and originating a new line of reflection, is most rare, and should be welcomed in spite of its sometimes becoming extravagant or even degenerating into the vagaries of insanity. individuals who manifest these impulses of development may not see their true relations, and may carry them to a ridiculous extreme, but they are still, perhaps, the unconscious organs of a new germ of thought, which shall plant itself and become largely fruitful in the minds of others of a larger philosophic capacity, but not perhaps capable of the originating inspiration; for those who perceive and co-ordinate the tendencies of thought are commonly not those who originate them.

There are antagonistic forces at work in the determination of the orbit of human thought as there are in the determination of the orbits of the planets—a

centrifugal or revolutionary force giving the expansive impulse of new ideas and a centripetal or conservative force working in the restraining influence of habit; the resultant of their opposing actions being the determination of the path of the evolution of mind, the eccentric impulse the ardent enthusiasm and passionate energy with which a belief is maintained and propagated, the self-sufficing faith which overcomes incredulity, gradually gaining disciples, and we have an explanation of the resemblance which has been noticed between the prophetic inspiration of genius and the mania of insanity. For the insane temperament may, according to the direction of its development, conduct its possessor to madness, or make him the originator of some new thought or new thing in the world; the faith and labour with which he labours in the achievement of his aim actually saving him from the madness from which he might otherwise have suffered. Here as elsewhere we must have regard to the external circumstances as well as to the internal fact in the determination of the result: we shall sometimes find one member of a family who has had an active career in a suitable track, go on through life without ever breaking down into mental derangement, while another whose circumstances have not been favourable becomes hoplessly insane.

Those who devote themselves specially to the study and treatment of insanity are sometimes charged, not always unjustly, with the disposition to confound eccentricity with insanity, and to detect disease where persons not so biassed fail to perceive anything abnormal. Eccentricity

is certainly not always insanity, but there can be no question that it is often the outcome of insane temperament, and may approach very near to or actually pass into insanity. Without making too much of peculiarities of thought, feeling, and conduct, that may be consistent with perfect sanity, there are facts to be borne in mind if the true interpretation of them is sought. In the first place, it will be observed that in families some members of which have displayed decided insanity, other members have been eccentric; secondly, eccentricity, after lasting for a time as such, has culminated in insanity; thirdly, monomaniacs who are known to be insane on certain subjects are often eccentric in their whole conduct; and, lastly, persons, who have been decidedly insane, having laboured under one of the recognised forms of mental derangement, often remain eccentric during life after their reputed recovery.

While we acknowledge that the insane temperament is not always an unmixed evil, but may sometimes issue in a favourable development, we must concede at the same time that it is always more or less a danger to the individual. When subjected to any great stress, arising from outward circumstances or from bodily disorder, he is more likely to break down in health of mind than a soundly constituted and stable organisation. Such physiological changes as the advent of puberty with the bodily and mental commotion which accompanies it, the occurrence of pregnancy, the climacteric change, are sometimes fraught with danger to the mental stability, while the disappointments and calamities of life will obviously

act with greater effect upon an unstable mental organisation; all these causes of disturbance meeting with a powerful co-operating cause in the constitutional predisposition. Moreover, the difficulties of education are greater in such a case. The natural impulses of the temperament manifest themselves early in life, requiring an attention and discipline which few persons are qualified to give, and which are not suitably applied in the routine of an ordinary education; the consequence being that during the important period of growth, when much may be done by proper training to determine the formation of character, the natural bias gains strength through indifference and inattention, or by a meddlesome interference is too violently checked.

In the foregoing remarks I have spoken generally of the insane temperament, but there are really varieties of it, a description of which would properly find its place in a treatise on insanity. All our present concern is to recognise distinctly that there is such a temperament, which, though by no means abolishing an individual's responsibility, must be taken into account when deeds of violence are done which seem to mark the outbreak of actual mental derangement. Unwarrantable as it may appear, to assume a crime to be evidence of insanity, when there have not been any previous symptoms to indicate disease, it is still possible that the crime may mark the period when an insane tendency has passed into actual insanity—when the weak organ has given way under the strain put upon it.

There is one occasional consequence of descent from

an insane stock, however, which is of special interest in our present inquiry-namely, an entire absence of the moral sense. To those who take the metaphysical view of mind, it will no doubt seem improbable that absence of moral sense should ever be a congenital fault of mental organisation, but if we are to put any trust in observation, we must acknowledge such a defect to occur sometimes in consequence of parental insanity. It may be witnessed, even in young children, who, long before they have known what vice meant, have evinced an entire absence of moral feeling with the active display of all sorts of immoral tendencies—a genuine moral imbecility or insanity. As there are persons who cannot distinguish certain colours, having what is called colour-blindness, and others who, having no ear for music, cannot distinguish one tune from another, so there are some few who are congenitally deprived of moral sense. Associated with this defect there is frequently more or less intellectual deficiency, but not always; it sometimes happens there is a remarkably acute intellect with no trace of moral feeling.

Here, then, we are brought back to the connection between crime and insanity. A person who has no moral sense is naturally well fitted to become a criminal, and if his intellect is not strong enough to convince him that crime will not in the end succeed, and that it is, therefore, on the lowest grounds a folly, he is very likely to become one. As I have pointed out in the first chapter, criminals often do come of families in which insanity or some other neurosis exists, and instances are met with in

which one member of a family becomes insane, and another reckless, dissipated, depraved, or perhaps even Several striking instances of the kind are criminal. related by Morel,\* who has traced and set forth in an instructive manner the course of human degeneracy in the production of morbid varieties of the human kind. Dr. Prichard mentions the case of a family, several members of which were afflicted with insanity, and were confined in asylums; they resembled each other; and the disease showed itself when they attained nearly the same period of life. A younger brother had a different organisation of body from the rest, and seemed likely to escape. There was only one other instance of immunity from the disease in the family-one, as he remarks, of still greater calamity. It was that of a brother who had never been, nor was thought to be, actually insane, but who was through life a reckless and depraved reprobate, and occasioned the greatest distress and vexation to his friends. If the secrets of their natures were laid open, how many perverse and wrong-headed persons, whose lives have been a calamity to themselves and others, how many of the depraved characters in history, whose careers have been a cruel chastisement to mankind, would be found to have owed their fates to some morbid predisposition!

Let it be noted, then, that the independent inquiries of observers in different departments of nature bring us to the same conclusion with regard to the essential dependence of moral sense upon organisation. In the first

<sup>\*</sup> Traité des Maladies Mentales.

chapter it was pointed out that the investigations of those who have made criminals their study have resulted in a conviction of a frequent defect or absence of moral sense, in consequence of defective organisation; and it has now been shown that the observations of those who have made insanity their study, have resulted in a conviction that the absence of moral sense is an occasional result of descent from an insane family. Pursuing two distinct paths of inquiry we have reached the same conclusion. Moral feeling cannot, therefore, be considered satisfactorily from a mental stand-point alone, as if it had no connection with physical structure; it is a function of organisation, and is as essentially dependent upon the integrity of that part of the nervous system which ministers to its manifestations as is any other display of mental function. Its sanction is given to such actions as are conducive to the well-being and the progress of the race, and its prohibitions fall upon such actions as would, if freely indulged in, lead to the degeneration, if not extinction, of mankind; in other words, when it is in healthy functional action, its function, like that of any other part of the body, is conducive to the well-being of the organism; when it is not exercised it decays, and so leads to individual degeneration, and, through individuals, to degeneracy of race.

The medical psychologist must hold that the best of the argument concerning the origin of the moral sense is with those who uphold its acquired nature. That the sentiments of common interest in the primitive family and tribe, and the habitual reprobation

of certain acts by individuals as injurious to the family or tribe, should finally generate a sentiment of right and wrong in regard to such acts, and that such sentiment should in the course of generations be transmitted by hereditary action as a more or less marked instinctive feeling, is in entire accordance with what we know of the results of education and of hereditary action. Time was, we know, when men wandered about the country in families or tribes. In order that they might rise from this nomadic state to a national existence, the acquisition and development of a moral sense must clearly have been essential conditions-not, however, as preformed agents, but as concomitant effects, of evolution.\* This development is still going slowly on: but the proof how little moral sense itself instigates progress is seen in the absence of it between nations. Men have risen to a national existence. but they have not yet risen to an international existence. With moral principles that have not changed within historical times, nations still laud patriotism, which is actually a mark of moral incompleteness, as the highest virtue; and statesmen sometimes think it a fine thing to sneer at cosmopolitanism. But it cannot be doubted that the time will come, though it may be yet afar off, when

<sup>\* &</sup>quot;And if we could imagine the human race to live back again to its earliest infancy—to go backwards through all the scenes and experiences through which it has gone forward to its present height—and to give back from its mind and character at each time and circumstance, as it passed it, exactly that which it gained when it was there before—should we not find the fragments and exuviæ of the moral sense lying here and there along the retrograde path, and a condition at the beginning, which, whether simian or human, was bare of all true moral feeling."—Body and Mind, p. 58.

nations will know and feel their interests to be one, when moral feeling shall be developed between them, and when they shall not learn war any more; it will come as a step in evolution and as a condition of universal brotherhood, not otherwise than as, coming between tribes, it bound them into nations, and made patriotism the high virtue which it is believed to be.\*

If other arguments were needed in support of the opinion that conscience is a function of organizationthe highest and most delicate function of the highest and most complete development thereof—they might be drawn from observation of conditions of moral degeneracy. Let it be noted how it is perverted or destroyed sometimes by disease or injury of brain. The last acquired faculty in the progress of human evolution, it is the first to suffer when disease invades the mental organization. One of the first symptoms of insanity—one which declares itself before there is any intellectual derangement, before the person's friends suspect even that he is becoming insane—is a deadening or complete perversion of the moral sense. In extreme cases it is observed that the modest man becomes presumptuous and exacting, the chaste man lewd and obscene, the honest man a thief. and the truthful man an unblushing liar. Short of this. however, there is an observable impairment of the finer moral feelings—a something different, which the nearest

<sup>\*</sup> The patriotic feeling which makes the individual sacrifice himself for the good of his country is, of course, a high moral feeling; but the word "patriotism" is often used, or misused, to denote that national feeling which places the interests of a country before those of humanity, and which inspires such an expression as "Our country against the world."

friends do not fail to feel, although they cannot always describe it. Now, these signs of moral perversion are really the first symptoms of a mental derangement which may, in its further course, go through all degrees of intellectual disorder, and end in destruction of mind, with visible destruction of the nerve-cells which minister to mind. Is the end, then, dependent on organization, or rather disorganization, and is the beginning not? This course of degeneracy is but a summary in the individual of what may be traced through generations; and in both cases we are constrained to believe that the moral changes are as closely dependent upon physical causes as are the intellectual changes which accompany or follow them. If it be not so, we may bid farewell to all investigation of mental function by a scientific method.

Note, again, the effect which a severe attack of insanity sometimes produces upon the moral nature of the individual. The person entirely recovers his reason; his intellectual faculties are as acute as ever, but his moral character is changed; he is no longer the moral man that he was; the shock has destroyed the finest part of his mental organization. Henceforth his life may be as different from his former life as, in an opposite direction, was the life of Saul of Tarsus from the life of Paul the Apostle to the Gentiles. An attack of epilepsy has produced the same effect, effacing the moral sense as it effaces the memory sometimes; and one of the most striking phenomena observed in asylums is the extreme change in moral character in the epileptic which precedes and heralds the approach of his fits. A fever or an injury

to the head has in like manner transformed the moral character. Many instances from different quarters might be brought forward in illustration of such physical effect upon moral being, but one mentioned by Dr. Prichard, which lies to hand, may suffice. In a large and wellregulated family all the members save one boy were of quiet and sober habits, of excellent disposition, and regular and industrious. This boy met with a severe accident, which injured his head. As he grew up he was quite different from the other children; he was utterly unmanageable, dissipated, wild, addicted to all kinds of excesses,—was on the verge of madness, though not intellectually deranged. Dr. Wigan puts the matter in a way that may seem more extravagant than it really is when he says:-"I firmly believe that I have more than once changed the moral character of a boy by leeches to the inside of the nose."

In bringing this chapter to an end, I shall note down three definite propositions, and make one general reflection, which may fitly be drawn from a consideration of its contents. The propositions are these:—That there is an insane temperament which, without being itself disease, may easily and abruptly break down into actual disease under a strain from without or from within; that moral feeling, like every other feeling, is a function of organization; that an absence of moral sense is an occasional result of descent from an insane family. The reflection which occurs is that, before entering upon the consideration of the degree and manner in which responsibility is modified by disease, it is necessary to realize the full

physiological meaning of these propositions—to take home to our convictions the modified relations in which a physiological study of mind places questions that have been hitherto questions of pure psychology or theology.

### CHAPTER III.

### DIFFERENT FORMS OF MENTAL DERANGEMENT.

Idiocy and imbecility—Kleptomania, pyromania, &c., often mark imbecility—Intellectual and affective insanity—General and partial mania—Monomania and melancholia—Dementia—General paralysis of the insane—Objection to the received system of classification according to certain prominent mental symptoms only—The lines on which it is proposed to lay down a better system—The diagnosis of insanity a strictly medical question—Morel's proposed classification—Skae's proposed classification—The path of future medical inquiry—The physician's duty to declare the truth, however unpopular it may be.

The observer who proceeds to examine the different kinds of mental incapacity under which men labour, perceives at the outset that he must distinguish cases of absence or weakness of mind from cases in which there is derangement of mind: the former being instances of *Idiocy* or *Imbecility*, the latter of *Insanity* proper.

Idiocy is a defect of mind which is either congenital, or due to causes operating during the first few years of life, before there has been a development of the mental faculties, and may exist in different degrees; the person afflicted with it may have the power of articulate speech, and manifest a limited degree of intelligence, or he may be utterly destitute of any semblance of intelligence and of the power of speech, being little more than a mere vegetating organism. Imbecility is simply weakness of mind owing to defective mental development, and may be of every

degree of deficiency, moral and intellectual; on the one hand, passing by imperceptible gradations into idiocy, and, on the other hand, passing insensibly into ordinary intelligence. There are some imbeciles in whom a general deficiency of intelligence is accompanied by a singular development of it in a special direction; they manifest, for instance, a surprising memory for details, such as dates, names, numbers, the exact particulars of distant events, which they recall and recount with the greatest ease and accuracy, or display certain remarkable mechanical aptitudes, or exhibit a degree of cunning which might seem inconsistent with their general mental feeble-To establish the existence of imbecility in any case it must be shown that there is a defect of understanding, not merely from a want of development of the mental faculties in consequence of a deficient education. but a defect of understanding by reason of some natural incapacity which no education will overcome—a mental privation. It is clear, however, that ignorance which is the result of utter neglect, though neither doctors nor lawyers would regard it as imbecility, might justly, on grounds of humanity, be held to lessen responsibility.

Obviously it must sometimes be a very difficult matter to decide whether there is actual imbecility or not, while the question of the degree of the individual's responsibility will be a more difficult one still—may, in fact, be practically insoluble. There can be no dispute with regard to the irresponsibility of idiots; deprived of understanding by a fate against which they cannot contend, it would be absurd to talk of responsibilities and obligations in con-

nection with them. But it is not so with imbeciles: some of them fail as clearly as idiots to reach the standard of responsibility, but others undoubtedly have a knowledge of right and wrong, and some power to do the right and forbear the wrong. In face of their natural defect, however, it would not be just to assign to them a full measure of responsibility; so that we are driven to recognise theoretically an entire absence of responsibility and a modified responsibility. In like manner, some are capable of managing their affairs, others are not, while of others it is hard to say whether they are or are not.

No special rules can be formulated for determining the question either of responsibility or capacity in conditions of imbecility; each case must be considered on its merits, the entire conduct of the individual through life being taken into account, in order to judge how far it betokens mental deficiency. It is a matter of observation that impulses to theft, incendiarism, and violence, are not uncommon in these cases where the intelligence is feeble and the passions are strong; and many crimes, such as arson, rape, theft, and homicide itself sometimes, are perpetrated by actual imbeciles: they are beings who have reached a lower stage of race-degeneracy than those criminals who, as pointed out in a former chapter, approach the imbecile type.

On proceeding to examine the manifold varieties of insanity, it is found that they may be arranged in two great divisions according to the presence or absence of palpable intellectual derangement. The first division will be formed of all those cases in which there is insanity of thought or insanity with delusion, and may be described as Intellectual or Ideational Insanity; the second division will consist of all those cases in which, without delusion or incoherence, there is insanity of feeling and action, and may properly be described as Affective Insanity.

Here, at the outset, medical experience comes into collision with legal tradition and popular prejudice. The common opinion is that a person who is insane must discover his disease by delusions, or raving, or great extravagance of conduct, and that, failing some marked exhibition of the kind, he cannot be mad: in fact, that madness, if it exist, is so palpable a thing that no one can fail to recognise it. Lawyers, whose knowledge of insanity is for the most part not greater than that of the vulgar, share this opinion; accordingly, when the physician testifies to the existence of less marked forms of disease, in which the indications are of a more subtile and obscure character, they are apt to think that he is propounding ingenious and fanciful theories, in order to exhibit his own cleverness, or that he has been so biassed by the nature of his studies that he will detect insanity wherever he sets earnestly to work to look for it. But facts remain and assert themselves when ridicule has spent itself in scorn of medical theories. There can be no doubt that there do exist cases of insanity in which the intellectual derangement is scarcely, if at all, apparent; and, furthermore, that some of the most dangerous forms of the disease are of this kind-most dangerous, indeed, because the insanity displays itself not in thought but in acts. It is necessary, therefore, to

make a class of these cases, even though it may not please those who have not had the opportunity, or have not been at the pains, to acquaint themselves with the facts.

On examining the cases of intellectual insanity or mania (the term mania being often used in its general sense as synonymous with insanity), it is seen that there are some in which the derangement of thought is general, the person exhibiting various delusions or more or less incoherence, and that there are others in which the derangement of thought appears to be limited to one subject, or to a certain order of ideas, the understanding being clear in other matters. The former are included under the class of what is called General Mania, which may be acute or chronic, the latter under the class of Partial Mania, which is always of a chronic nature. It is seldom that any question of responsibility arises with regard to general mania, the mental derangement being unequivocal, although it may be remarked by the way that if the legal criterion of responsibility, which is a possession of knowledge of right and wrong in reference to the particular act, were strictly enforced in every case, it would sometimes entail the condemnation and punishment of persons labouring under general mania, who, in the wantonness of their fury, do acts of violence which they know well they ought not to do, but which at the same time they cannot help doing.

The existence of a so-called partial mania is readily admitted: there is neither popular nor legal unwillingness to concede that a man may be insane upon one point and sane in all other respects, although, rightly

considered, such a doctrine is more remarkable than that a man should evince insanity of feeling and conduct without delusion; indeed, there is a tendency rather to overrate the frequency of occurrence of such a state, and to give it a more rigid definition than is conformable with nature. The collision between medical experience and legal dogma takes place here in reference to the responsibility of a person so suffering, in the event of his committing a crime which is not manifestly the offspring of his delusion; the lawyers asserting, and the doctors denying, that he ought to be punished exactly as if he were of entirely sound mind.

It is usual to make a subdivision of partial insanity into monomania and melancholia, according to the character of the feeling which accompanies the delusion of thought: when the person is elated, confident, self-complacent, and has deranged ideas in conformity with these feelings, he is said to labour under monomania; when he is depressed, wretched, distrustful, and has corresponding unsound ideas, he is said to labour under melancholia. Some authors, however, raise melancholia into a special class, using monomania and partial mania as synonymous terms, notwithstanding that some cases of melancholia really afford the most striking examples of partial insanity; this they do because cases occur in which there are many fearful apprehensions and delusions with corresponding distress-because, in fact, there is general intellectual derangement with melancholic depression. All cases of melancholia cannot properly, therefore, be described as cases of partial insanity, some being really cases of acute

general derangement, which again run so near to, or so run into, acute mania that they cannot always be distinguished from it. The term monomania, if used of melancholia at all, should be applied to the chronic form of the disease only—to that which Esquirol proposed to distinguish as *lypemania*. The uncertainty of these divisions, which is thus made apparent, attests the artificial and unsatisfactory nature of the received classification, which holds its ground only because a better one has not yet been propounded, or, if propounded, has not gained acceptance.

When any of the above-mentioned forms of insanity has lasted for some time, without amendment taking place, the mind is often weakened, and the person, passing through degrees of craziness, falls finally into a condition of what is called dementia. It is the destruction of mind by disease, and may of course be more or less general and complete; in the worst cases demented patients have as little intelligence as the complete idiot, from whom, however, they differ in having lost what he never possessed.

There is one striking form of insanity in which mental symptoms of a tolerably uniform character are accompanied by symptoms of gradually increasing paralysis of the muscular system, and which runs a definite course to a fatal termination; it is usual, therefore, to make of it a special class under the name of General Paralysis of the Insane. Here, it will be observed, there is a departure from the principle of classifying insanity according to its prominent mental features; the bodily symp-

toms which accompany the mental derangement being taken into account, and made the basis of the name.

With this exception, however, the received classification is founded on the recognition of a few of the most prominent mental symptoms only—is purely psychological. It amounts simply to this: when a person is excited, and raves more or less incoherently, he has acute mania; when, after subsiding into a more quiet state, he continues to have delusions and to be incoherent, he has chronic mania; when he exhibits insane delusions on one subject or in regard to certain trains of thought, and talks sensibly in other respects, he is said to have monomania; when he is gloomy, wretched, and fancies himself ruined or damned, he has melancholia; and when his memory is impaired, his feelings quenched, his intelligence enfeebled or extinct, he is said to be suffering from dementia.

Much dissatisfaction has been felt with this classification, and many fruitless attempts have been made to supersede it by a better one. It is extremely vague, and obviously teaches us very little concerning the disease; it is in fact a rough classification of certain marked symptoms, not an exact classification of the different varieties of disease which are included under the general term insanity; we learn nothing from it concerning the cause of the particular form of disease, its course and duration, its probable termination, its most suitable treatment. Moreover, it has done not a little mischief by confining attention to a few general mental features, and diverting observation from the

various physical causes and symptoms of the disease; it has strengthened the notion that insanity is a disease of mind, without at the same time bringing into prominence the fact that it is a disease of body also. No wonder it has been said that any one of good common sense is as competent as a medical man to determine whether a person is insane or not. This assertion would not be disputed if we could only guarantee the application of true common sense, which proceeds from experience and knowledge, and in any department of scientific inquiry is the common sense of those who have these qualifications; the so-called common sense of any one not so enlightened is very apt to be common prejudice springing from ignorance; and assuredly it would argue in such a one a very uncommon sense, if he was, without special experience, as competent as those who had laboured hard to inform themselves by a patient study of the disease in all its stages. Is it not truly strange that common sense should ever have been declared to be the measure of that the essence of which is that it is not sense -that it is utterly opposed to all the experience of sanity?

An example will serve best to show how necessary to the formation of a right conclusion is observation informed by experience. A man who has been hitherto temperate in all his habits, prudent and industrious in business, and exemplary in the relations of life, undergoes a great change of character, gives way to dissipation of all sorts, launches into reckless speculations in business, and becomes indifferent to his wife, his family, the obligations of his position; his surprised friends see only the effects of vice, and

grieve over his sad fall from virtue; after a time they hear that he is in the police court accused of assault or of stealing money or jewelry, and are not greatly astonished that his vices have brought him to such a pass. Examined by a competent physician, he is discovered to have a slight peculiarity of articulation and perhaps an inequality of size of the pupils, symptoms which, in conjunction with the previous history, enable the physician to say with positive certainty that he is struck with a disease which, sapping by degrees his intellect and strength, will within no long time destroy his mental and bodily powers, and finally his life. Our knowledge is so exact that we can do what is the best test of a science—predict with certainty what will happen. The dissipation, the speculation, and the theft itself were, as they often are, the first symptoms of general paralysis of the insane. Plainly, common sense without special experience could have small chance of coming to a right conclusion in such a case. The example will furthermore serve to show of what little service a classification by mental symptoms only is, and what little information we get when we are obliged to be content with such a classification; for in the early stages of the disease it would be necessary to describe them as those of affective or moral insanity, at a later stage as those of intellectual insanity, and finally as those of dementia. Thus one patient might, in the course of a short time, run through all the classes of symptoms while suffering from one and the same disease. So plain is this, and so characteristic are the mental and bodily features of general paralysis, that all writers on insanity are agreed in making it an exception to the general rule of classification; they constitute it a class by itself, thus giving the strongest practical condemnation to a purely psychological classification.

The example which has been used to exhibit the defect may be used also to indicate the remedy. We have only to do with other forms of insanity as we have done with general paralysis—to study carefully their natural histories, and so to endeavour to arrive at a natural classification of them. By exact observation of the cause, the bodily and mental symptoms, and the course of the disease in each case, and by an accumulation of such observations, it is believed that we shall in time be able to form natural groups or families, each having certain characteristic features, a knowledge of which will at once teach us something definite concerning the causation, course, and probable termination of a particular case belonging to the group. Our aim should be to apply the strict rules of inductive observation and generalization to the study of insanity from its earliest beginnings to its latest stages-to inquire closely into the antecedent conditions of the disease in each case, to observe accurately all the facts, physical and mental, that are presented in its course, to make experiments, as it were, on the patient, by using means to elicit his individual peculiarities of mind, as we use means to detect his bodily ailments, and so to obtain a complete and accurate history of the disease. Having accumulated a number of such observations, the arrangement of them in groups, or the generalization of them into natural types, will follow, so that when a particular case presents itself in practice it will be possible, by referring it to its natural order, to bring definite information to bear upon it, instead of, as under the present system of denoting by a vague name a variety of diseases, some of which have nothing more in common than the particular symptom from which the name has been derived, gaining little or no definite knowledge of it.

It is evident that the farther medicine advances on this path of inductive inquiry, the less it will be exposed to the criticism of lawyers and others who have no practical knowledge of the disease. It will be impossible to declare, as an English Lord Chancellor ignorantly declared not long ago, that insanity is properly a subject of moral inquiry, and to condemn, as he ventured foolishly to do, "the evil habit which had grown up of assuming that it was a physical disease;" it will become more and more evident that the decision of its nature must be guided by the knowledge of those who have made it their study; and every one will see the absurdity of the pretension of lawyers to make a medical diagnosis of insanity without medical aid, as every one would now see the absurdity of their pretension to make a diagnosis of fever or of smallpox. Not that the cases are exactly similar: for while medical men are making a diagnosis of insanity in a doubtful case where it is alleged in explanation of crime, it must be remembered that the law is also concerned to make a diagnosis—the diagnosis of crime; and the symptoms from which both lawyers and medical men

must come to a conclusion are many of them the same. Unfortunately while the lawyer can see and appreciate the symptoms which indicate crime, he cannot appreciate the symptoms which mark disease; these he overlooks or ignores, for they have no meaning to him; and he is apt to think that the physician who does perceive them and recognise their serious meaning, is simply making crime evidence of insanity. The theft in the early stages of general paralysis is a sufficiently palpable fact; who but a physician familiar with the disease can recognise the inequality of pupils and the peculiarity of articulation which mark the beginning of incurable brain-disease, and give the true interpretation of the theft? Insanity being a disease which cannot exist apart from disorder of bodily organs and functions, the diagnosis of it must belong to the physician; for he alone is competent to investigate and appreciate these disorders. Those who would take from him the diagnosis might as well claim to take the treatment of the disease.

The late M. Morel, who was the distinguished physician of the asylum of St. Yon, near Rouen, some years ago propounded a new system of classifying insanity, which, although not available for practical purposes and easily shown to be defective as a theoretical system, had the merit of expressing the tendencies of modern inquiries in a systematic form. His aim was the classification of mental disorders in relation to their causes, and he arranged all forms of them in six principal groups, each group having its different subdivisions into classes or varieties. The mention of these groups will serve fitly

to show how essentially a bodily disease insanity is, and how little real knowledge of its causation and nature in any case can be obtained except by way of medical observation and inference.

The first group he designated Hereditary Insanity. All cases belonging to it have, he affirmed, special characters by which they may be recognised; the outbreak of the disease may be determined by ordinary causes, but, once it has been developed, there are special features in its form, its course, and its termination which to a skilled observer clearly denote its origin. The second group comprises all cases of insanity in which the disease has been caused by the habitual use of intoxicating and narcotic substances, such as alcohol, opium, haschisch; or by poisonous substances, such as phosphorus, lead, and mercury; or by exposure to the baneful influence of marsh miasmata. The peculiar disorders of the physical and mental functions observed in all the varieties of this group, though presenting special differences necessitating subdivisions, have so much in common, are in fact said to be so far characteristic, as to warrant the formation of the group to which he gave the name of Toxic Insanity. The third great group consists of insanity occasioned by the transformation of other neuroses, and includes hysterical, epileptic, and hypochondriacal insanity. The hysteria, the epilepsy, and the hypochondria exercise a special influence upon the nature of the ideas and acts of those who suffer from them; the kind of derangement in each case reflecting the fundamental character of the

neurosis of which it is a transformation, although each kind has at the same time characters that are common to it and the other divisions of the group. His fourth group comprised all cases in which the insanity is owing to idiopathic disease of the brain. Chief among these is general paralysis of the insane, constituting the principal variety; another variety being formed of those cases in which there is gradual enfeeblement or abolition of the mental faculties in consequence of chronic disease of the brain or its membranes. The fifth group he designated Sympathetic Insanity, and it included all the cases in which the primary seat of disease is not in the brain, but in some other organ of the body, the brain being secondarily and sympathetically affected. The sixth and last group was not founded on any relation of the disease to its cause, the principle of the classification being departed from, but was made for the sake of convenience; in it were included all cases of dementia—the terminal stage of mental degeneration.

I shall not enter into an exposition of the faults of this scheme of classification which has been propounded by Morel; let it suffice here to point out that it has the merit of bringing into just prominence the physical causation of insanity. Without doubt the disease may be caused in every one of the ways described by Morel; and without doubt, when it is so caused, there are usually bodily symptoms which are as essential a part of the disease as are the mental symptoms which chiefly attract the attention. Instead then of seizing upon a prominent mental symptom, such as an impulse to suicide, homicide, theft, incendiarism,

which may be met with in a particular case, and thereupon making such pathological entities as suicidal mania, homicidal mania, kleptomania, and pyromania, which have no existence as distinct diseases, the aim of the inquirer should be to observe carefully all the bodily and mental features, and to trace patiently in them the evolution of the cause. Given a case of insanity in which homicidal impulse is displayed he will observe with what other symptoms the impulse is associated, will thereupon refer the case to the natural group to which it belongs, and set forth its relations to its cause; so he will present an accurate picture of a real disease, instead of concealing inadequate observation under a pretentious name, and offering the semblance of knowledge by the creation of what can be described only as a morbid metaphysical entity.

To the late Dr. Skae of Morningside we are indebted for another praiseworthy attempt to distribute the varieties of mental derangement in natural groups having characteristic features. He proposed to classify insanity, not by its mental symptoms, but by the bodily states of which the mental disorders are the accompaniments; in this way he propounded as many as thirty-five groups, each having a particular bodily condition and a special psychological character. This is not the place to describe and discuss these so-called natural orders, which have yet to establish their claim to acceptance; it will be sufficient to indicate briefly their character, in order to show on what physical paths scientific investigation of mental derangement is now proceeding.

The first natural group is idiocy, including imbecility in all its various forms and degrees. In this group must be placed all cases of true moral idiocy and imbecility, many of which appear in the present classification as monomanias of various kinds-for example, cases of instinctive cruelty, destructiveness, and theft. kleptomaniacs have, as Dr. Skae justly remarked, had that tendency from their childhood, and have been moral imbeciles. The second group is that of epileptic insanity, including the cases of insanity occurring in connection with epilepsy, some, if not all, of which certainly present special psychological features. Another group is the insanity of pubescence, the disease occurring about the period of pubescence and being apparently initiated by the changes in the circulation and nervous system which then take place. That these important changes do produce a great revolution in the mental and bodily economy, and become sometimes causes of insanity, especially in those who have a predisposition to the disease, is beyond question, and that the mental symptoms are in some respects special, if not quite distinctive, may also be admitted. The insanity of pregnancy, puerperal insanity, and the insanity of lactation constitute again three distinct groups, a knowledge of the features of which should enable a skilled observer at once to place a particular case in its proper category. At the change of life in women an outbreak of mental disorder sometimes occurs, which, presenting special features, may be described as climacteric insanity. When insanity occurs in connection with phthisis, and especially when the diseases

manifest themselves in the patient about the same time, the mental derangement exhibits peculiarities of features which are supposed to justify the formation of a group of cases under the name of phthisical insanity. The insanity of old age, which may begin as mania or melancholia, but generally presents more or less marked features of dementia, constitutes the distinct natural group of senile insanity. Delirium tremens and its allied disease dipsomania constitute two more groups.

These may serve as examples of the natural orders which Dr. Skae sketched out. All the cases which cannot be referred to any one of them he classes under the general name of *idiopathic insanity*, divisible into two varieties,—sthenic and asthenic, according to the strong or feeble condition of the bodily health. All of them, whether acute or chronic, whether sthenic or asthenic, whether the symptoms are those of excitement or depression, are to be referred to moral causes, such as loss of fortune or relative, or severe mental shock or strain of some kind, and are all preceded by the same proximate cause—want of sleep.

From the names used in this classification to designate the different groups, it might naturally be looked upon as a classification based upon etiology—that is, upon the observed or imagined causation of the disease in each case. But this was not its author's intention; his real aim having been to apprehend all the special features in the entire natural history of the disease—in its early symptoms, its variations, its course and termination, as well as its supposed cause, and so by bringing together

similar cases to constitute a natural family or group of cases. The supposed cause or partial cause is used only as the most convenient designation for the group. The name is not of much moment so long as we are not led astray by it: the important question of course is whether there are really so many distinct groups having characteristic features, so many true natural orders, as are described, and this is a question which can only be answered after careful observation in a large field of experience.

Whatever may be the result of future inquiries, it is certain that some of the proposed natural orders are of practical value, and that they are founded on a method which the experienced physician instinctively follows when he has to give an opinion with regard to a case of mental derangement. He does not ask himself whether it is a case of mania or melancholia, for he knows that he gets no real information thereby, but he asks himself such questions as whether it is connected with epilepsy, or phthisis, or childbirth, or is a case of general paralysis, and thereupon compares it with a similar case which has occurred in his practice. The more experiences of a like kind he has thus stored up in his memory, the sounder will his judgment be in a particular case; the difference between a skilled physician and one who has less skill in insanity, as in other departments of an inexact science like medicine, being in the number and variety of cases which he can thus call up from the stores of his experience. He may not always be able to impart to others an exact account of the steps by which he has reached his conclusion, unconscious acquisition and instinctive decision preceding conscious method and deliberate judgment, but his opinion may still be sound. When he can say of one form of insanity, as he can of general paralysis, which in its early stages is not unfrequently punished as crime, that it is a physical and mental disease which will run a definite course, present certain characteristic symptoms, and end in a certain way, commonly within a certain time, he may fairly claim that some weight should be attached to his opinions in cases concerning which he is unable to speak with equal precision. Assuredly he may demand that, Lord Chancellors notwithstanding, insanity should be treated, not as a subject of moral inquiry, but as a disease to be investigated by the same methods as other diseases.

I have made these remarks on classification, not with the design of discussing here what would properly belong to a treatise on insanity, but in order to point out the path of exact inquiry which is now being pursued by those who are engaged in the study of the disease. They not only recognise that it is a bodily disease, but they are labouring with increasing success to discover the particular bodily derangements with which particular mental symptoms are associated. It is plain that as they advance upon this path they must arrive at results which are less and less within the apprehension of those who have not made the disease a study, and that they may expect to escape some of the criticism of which they now receive such abundant measure. They will occupy a position more like that of

the chemical expert, who deals with matters which all persons acknowledge to lie beyond the range of untaught apprehension. There are few who, without having had a special chemical training, would venture to pronounce an opinion on the value of the chemical evidence given in a case of poisoning, but everybody thinks himself competent to say whether a man is mad or not; and as the common opinion of an insane person is that he is either a raging maniac or that he has some outrageous delusion, it is no wonder that judgments have sometimes been rash and censures unjust. Meanwhile the physician, confident in the assurance that patient and careful observation of insanity, with the earnest desire to understand its nature, does fit him to express with authority the results of his experience, must not shrink from pronouncing his opinion sincerely and fearlessly, however unpopular it may be. "A wretch foredoomed to insanity by mal-organization or hereditary defect, or driven mad by poverty, or by disappointment acting on a distempered brain, has no other friends in the world. . . . The same courage which causes the physician to brave the dangers of pestilence should support him in this duty beneath the assaults of pestilent tongues and pens. Not the voice of the people calling for executions, nor the severities of the bench frowning down psychological truth, should shake his purpose as an inquirer and a witness. His business is to declare the truth. Society must deal with the truth as it pleases." (Conolly.)

In the following chapters I shall limit myself to a consideration of those forms of mental derangement concern-

ing which doubts and disputes arise, and to the discussion in relation to them of the value of the criterion of responsibility which is adopted in courts of justice. I shall not, as would be proper in a treatise on insanity, describe in detail the different forms, but shall discuss the popular and legal aspects of them in the light of medical observation. It will be most convenient, therefore, to adopt the simplest names by which they are commonly known, without regard to a more scientific nomenclature. Before entering upon this task, however, it is necessary to set forth what are the legal views of responsibility in regard to insanity. In the preceding chapters the aspects of medical inquiry have been sufficiently displayed; it remains now to describe the legal doctrines, to show how they have developed into their present form, and to point out how they stand related to the results of scientific observation.

## CHAPTER IV.

### LAW AND INSANITY.

- 1. Early legal notions of insanity-Lord Hale's dietum-Mr. Justice Tracey's wild beast theory of madness-The trial of Hadfield: Erskine's declaration that delusion was the true character of insanity - The trial of Bellingham: Chief Justice Mansfield's dietum that a knowledge of right and wrong generally was the proper criterion of responsibility-The trial of McNaughten: answers of the English judges to questions put by the House of Lords-A knowledge of right and wrong in reference to the particular act at the time of committing it laid down as the true eriterion of responsibility—One exception to this rule formulating the question to be left by the judge to the jury—Assumption by the judge of the function of the jury-Criticism of the answers of the English judges by American judges-Uncertainty of result in English trials where insanity is alleged—The dieta of American judges: eases of Boardman v. Woodman, State v. Jones, and State v. Pike-Articles of the French penal code and of the latest German penal eode-Comment upon the right-and-wrong theory of responsibility.
- Former legal views of testamentary capacity: eases of Cartwright v. Cartwright, Dew v. Clarke, and Waring v. Waring—Recent American decisions—Judgment of the Court of Queen's Bench in the ease of Banks v. Goodfellow—Comparison of the law relating to testamentary capacity with the law relating to criminal responsibility.

# 1. Criminal Responsibility.

LOOKING back at the strange and erroneous notions which were formerly entertained of the nature and causes of insanity, and considering what little observation was made of its manifold varieties, we cannot wonder that its jurisprudence was in a very defective state. At first

two kinds of insanity only seem to have been recognised by English law-idiocy and lunacy: the idiot who, from his nativity, by a perpetual infirmity is non compos, and the lunatic, who hath sometimes his understanding, and sometimes not, aliquando gaudet lucidis intervallis, and therefore is non compos mentis, so long as he hath not understanding. But as time went on a partial insanity was recognised as distinct from total insanity, although this partial insanity was declared not to absolve a person from responsibility for his criminal acts. "There is," says Lord Hale, "a partial insanity, and a total insanity. The former is either in respect to things, quoad hoc vel illud insanire. Some persons that have a competent use of reason in respect of some subjects, are yet under a particular dementia in respect of some particular discourses, subjects, or applications;—or else it is partial in respect of degrees; and this is the condition of very many, especially melancholy persons, who for the most part discover their defect in excessive fears and griefs, and yet are not wholly destitute of the use of reason: and this partial insanity seems not to excuse them in the committing of any offence for its matter capital; for, doubtless, most persons that are felons of themselves and others are under a degree of partial insanity when they commit these offences. It is very difficult to define the invisible line that divides perfect and partial insanity; but it must rest upon circumstances duly to be weighed by judge and jury, lest, on the one side, there be a kind of inhumanity towards the defects of human nature; or, on the other

side, too great an indulgence given to great crimes." The invisible line which it was so difficult to define was not, let it be noted, between sanity and insanity, but between perfect and partial insanity. It was thought no inhumanity towards the defects of human nature to punish as a fully responsible agent a person who was suffering from partial insanity, whatever influence the disease might have had upon his unlawful act.

The principle thus laid down by Lord Hale was subsequently acted upon in English courts. Thus, in the trial of Arnold, an undoubted lunatic, for shooting at Lord Onslow, in 1723, Mr. Justice Tracy said, "It is not every kind of frantic humour, or something unaccountable in a man's actions, that points him out to be such a madman as is exempted from punishment: it must be a man that is totally deprived of his understanding and memory, and doth not know what he is doing, no more than an infant, than a brute or a wild beast: such a one is never the object of punishment." In this respect a wide distinction was maintained between civil and criminal cases; for while the law would not allow exemption from punishment for criminal acts unless the reason was entirely gone, it invalidated a person's civil acts, and deprived him of the management of himself and his affairs, when his insanity was only partial, and when the act voided had no discoverable relation to it. A man's intellect might not be sufficient to enable him to conduct his affairs, and to dispose of his property, though quite sufficient to make him responsible for a criminal act: it was right to hang for murder one who was not thought fit to take care of himself and his affairs.

It was at the trial of Hadfield, in 1800, for shooting at the King in Drury Lane Theatre, that Lord Hale's doctrine was first discredited, and a step forward made for the time. The Attorney-General, who prosecuted, had appealed to this doctrine, and told the jury, in accordance with it, that to exempt a person from punishment on the ground of insanity, there must be a total deprivation of memory and understanding. Mr. Erskine, who was counsel for the defence, argued forcibly in reply, that if such words were taken in their literal sense, "no such madness ever existed in the world;" that in all the cases that had filled Westminster Hall with complicated considerations, "the insane persons had not only had the most perfect knowledge and recollection of all the relations they stood in towards others, and of the acts and circumstances of their lives, but had in general been remarkable for subtlety and acuteness; and that delusion, of which the criminal act in question was the immediate unqualified offspring, was the kind of insanity which should rightly exempt from punishment. Delusion. therefore, where there is no frenzy or raving madness, is the true character of insanity." There was no doubt that Hadfield knew right from wrong, and that he was conscious of the nature of the act before he committed it: he manifested design in planning and cunning in executing it; he expected also that it would subject him to punishment, for this was his motive in committing it; still it was plain to everybody that he was mad, and that the act was the product of his madness. The result was that he was acquitted, the acquittal not having taken place in consequence of a judicial adoption of delusion in place of the old criterion of responsibility. as it has sometimes been said, but having been rather a triumph of Erskine's eloquence, and of common sense over legal dogma.

In the next remarkable case, that of Bellingham, who was tried for the murder of Mr. Spencer Perceval, in 1812, a conviction took place, and the prisoner was executed, although it was perfectly clear that he had acted under the influence of insane delusions; the Attorney-General, who prosecuted, declaring, and Chief Justice Mansfield, who tried the case, concurring, "upon the authority of the first sages in the country, and upon the authority of the established law in all times, which has never been questioned, that although a man might be incapable of conducting his own affairs, he may still be answerable for his criminal acts, if he possess a mind capable of distinguishing right from wrong." Note here, then, that a modification had now been made in the test of responsibility; in place of its being required that the sufferer, in order to be exempt from punishment, should be totally deprived of understanding and memory, and know not what he was doing, no more than a brute or a wild beast-in place, that is, of what might be called the "wild beast" form of the knowledge test, the power of distinguishing right from wrong was insisted on as the test of responsibility. The law had changed considerably without ever acknowledging that it had changed. Let it be observed, however, that it was the power of distinguishing right from wrong, not in relation to the particular act, but generally, which was made the criterion of responsibility in this case; for Lord Mansfield, speaking of the kind of insanity in which the patient has the delusion of being injured, and revenges himself by some hostile act, said that "if such a person were capable, in other respects, of distinguishing right from wrong, there was no excuse for any act of atrocity which he might commit under this description of derangement. It must be proved beyond all doubt that at the time he committed the atrocious act, he did not consider that murder was a crime against the laws of God and nature.\*

\* Dr. Ray thus comments upon this doctrine:-"That the insanc mind is not entirely deprived of this power of moral discernment, but on many subjects is perfectly rational and displays the excreise of a sound and well-balanced mind, is one of those facts now so well established, that to question it would only display the height of ignorance and presumption. The first result, therefore, to which the doetrine leads is, that no man can successfully plead insanity in defence of crime; because it can be said of no one who would have occasion for such a defence, that he was unable in any case to distinguish right from wrong . . . The purest minds cannot express greater horror and loathing of various crimes than madmen often do, and from precisely the same causes. Their abstract conceptions of crime, not being perverted by the influence of disease, present its hideous outlines as they ever were in the healthiest condition; and the disapprobation they express at the sight arises from sincere and honest convictions. The particular criminal act, however, becomes divorced in their minds from its relations to erime in the abstract; and being regarded only in connection with some favourite object which it may help to obtain, and which they see no reason to refrain from pursuing, is viewed, in fact. as of a highly laudable and mcritorious nature. Herein, then, consists their insanity-not in preferring vice to virtue, in applauding crime and deriding justice, but in being unable to discern the essential identity of nature between a particular crime and all other crimes, whereby they

Thus far it is evident that principle was changing and practice was uncertain. After the old "wild beast" form of the knowledge test had been quietly abandoned, when the enunciation of it caused too violent a shock to the moral sense of mankind, we find two theories acted upon in practice: in the case of Hadfield the existence of delusion instigating the criminal act was the reason of his acquittal; in Bellingham's case, an absence of knowledge of right and wrong generally, not in respect of the particular act, was deemed necessary to exempt the individual from punishment; the latter theory being entirely inconsistent with the former, and neither of them being consistently acted upon in subsequent trials. Most often a knowledge of right and wrong, without reference to the particular act, was plainly declared by the judge to be the simple and sufficient criterion of responsibility, and the jury was instructed accordingly; but this criterion was sometimes modified by the qualifications which judges introduced to meet their individual views, or to prevent the conviction of a person who was plainly insane and irresponsible. There was no settled principle, no actual uniformity of practice, no certainty of result.

In this uncertain way matters went on until a great sensation was made by the murder, in 1843, of Mr.

are led to approve what, in general terms, they have already condemned. It is a fact, not calculated to increase our faith in the 'march of intellect,' that the very trait peculiarly characteristic of insanity has been seized upon as a conclusive proof of sanity in doubtful cases; and thus the infirmity that entitles one to protection, is tortured into a good and sufficient reason for completing his ruin."—"A Treatise on the Medical Jurisprudence of Insanity," 5th ed. pp. 26—28.

Drummond by McNaughten, who shot him under the influence of a delusion that he was one of a number of persons whom he believed to be following him everywhere, blasting his character and making his life wretched. McNaughten had transacted business a short time before the deed, and had shown no obvious symptoms of insanity in his ordinary discourse and conduct. He was, however, acquitted on the ground of insanity. Thereupon the House of Lords, participating in the public alarm and indignation which were occasioned by the acquittal, propounded to the judges certain questions with regard to the law on the subject of insanity when it was alleged as a defence in criminal actions; the object being to obtain from them an authoritative exposition of the law for the future guidance of courts. The answers of the judges to the questions thus put to them constitute the law of England as it has been applied since to the defence of insanity in criminal trials.

It is not necessary to quote the questions and answers at length; the latter are somewhat confused, and the substance of them may be correctly given in fewer words. "To establish a defence on the ground of insanity, it must be clearly proved that at the time of committing the act the party accused was labouring under such a defect of reason from disease of the mind as not to know the nature and quality of the act he was doing, or, if he did know it, that he did not know he was doing what was wrong." It will not escape attention that the question of right and wrong in the abstract was here abandoned, being allowed quietly to go the way of the wild-beast

form of the knowledge-test; the question of right and wrong was to be put in reference to the particular act with which the accused was charged. Moreover, it was to be put in reference to the particular act at the time of committing it. Did he at the time know the nature and quality of the act he was doing? These two points have been overlooked sometimes by hostile critics, who have condemned the rule enunciated, as though it referred to a knowledge of right and wrong generally. One may object to the rule as a bad one, and because it is calculated to mislead a jury, who are very likely to be misled by the existence of a general knowledge of right and wrong in the accused person to judge wrongly concerning his knowledge of the particular act at the time, but it must be allowed at the same time that it will, if strictly applied, cover and excuse many acts of insane violence. Of few insane persons who do violence can it be truly said that they have a full knowledge of the nature and quality of their acts at the time they are doing them. Can it be truly said of any person who acts under the influence of great passion that he has such a knowledge at the time?

The rule thus laid down, differing so much from that which was enunciated and mercilessly acted upon in Bellingham's sad case, was, however, limited in its application by a formidable exception. In reply to the question—"If a person, under an insane delusion as to existing facts, commits an offence in consequence thereof, is he thereby excused?"—the judges declared that "on the assumption that he labours under partial delusion only

(whatever that may mean), and is not in other respects insane, he must be considered in the same situation as to responsibility as if the facts with respect to which the delusion exists were real. For example, if, under the influence of delusion, he supposes another man to be in the act of attempting to take his life, and he kills that man, as he supposes, in self-defence, he would be exempt from punishment. If his delusion was that the deceased had inflicted a serious injury to his character and fortune, and he killed him in revenge for such supposed injury, he would be liable to punishment." Here is an unhesitating assumption that a man, having an insane delusion, has the power to think and act in regard to it reasonably; that, at the time of the offence, he ought to have and to exercise the knowledge and self-control which a sane man would have and exercise, were the facts with respect to which the delusion exists real; that he is, in fact, bound to be reasonable in his unreason, sane in his insanity. The judges thus actually bar the application of the right and wrong criterion of responsibility to a particular case, by authoritatively prejudging it; instead of leaving the question to the jury, they determine it beforehand by assuming the possession of the requisite knowledge by the accused person. One of them, however, Mr. Justice Maule, so far dissented as to maintain that the general test of capacity to know right from wrong in the abstract ought to be applied to this case as to other cases.

But this is not all the uncertainty which appears in these answers. In another part of them it is said, in reference to the same supposed case, that "notwithstanding the party accused did the act complained of with a view, under the influence of insane delusion, of redressing or revenging some supposed grievance or injury, or of producing some public benefit, he is nevertheless punish. able, if he knew at the time of committing such crime that he was acting contrary to the law, by which is meant the law of the land." This answer really conflicts with a former answer; it is obvious that the knowledge of right and wrong is different from the knowledge of an act being contrary to the law of the land; and it is certain that an insane person may do an act which he knows to be contrary to law, because, by reason of his insanity, he believes it to be right, because, under the influence of insane delusion, he is a law unto himself, and deems it a duty to do it, perhaps "with a view of producing some public benefit."

The uprightness of English judges has happily been seldom called in question, but it may well be doubted whether the result of their solemn deliberations, as embodied in their answers to the questions put to them by the House of Lords, will commend their wisdom to the approbation of foreign nations and future ages. If it be true, as is sometimes said, that the verdict of foreign nations is an anticipation of the verdict of posterity, there are already sufficiently strong indications that their conclusions will be no honour to them in times to come. That they are unanimously condemned by all physicians who have a practical knowledge of the insane, may not affect the confidence of those who accept them, seeing that judges and physicians take such different stand-

points; but when the judges of other countries condemn them with equal earnestness, it is impossible for the most confident to help feeling some hesitation. In the case of *State* v. *Jones*, tried in the court of New Hampshire, America, Judge Ladd, after passing in review the answers of the English judges, thus speaks of the doctrine embodied in them:—

"The doctrine thus promulgated as law has found its way into the text books, and has doubtless been largely received as the enunciation of a sound legal principle since that day. Yet it is probable that no ingenious student of the law ever read it for the first time without being shocked by its exquisite inhumanity. It practically holds a man confessed to be insane, accountable for the exercise of the same reason, judgment, and controlling mental power that is required in perfect mental health. It is, in effect, saying to the jury, the prisoner was mad when he committed the act, but he did not use sufficient reason in his madness. He killed a man because, under an insane delusion, he falsely believed the man had done him a great wrong, which was giving rein to a motive of revenge, and the act is murder. If he had killed a man only because, under an insane delusion, he falsely believed the man would kill him if he did not do so, that would have been giving the rein to an instinct of self-preservation, and would not be crime. It is true in words the judges attempt to guard against a consequence so shocking as that a man may be punished for an act which is purely the offspring and product of insanity, by introducing the qualifying phrase, "and is not in other respects insane." That is, if insanity produces the false belief, which is the prime cause of the act, but goes no further, then the accused is to be judged according to the character of motives which are presumed to spring up out of that part of the mind which has not been reached or affected by the delusion or the disease. This is very refined. It may be that mental disease sometimes takes a shape to meet the provisions of this ingenious formula; or, if no such ease has ever yet existed, it is doubtless within the scope of Omnipotent power hereafter to strike with disease some human mind in such peculiar manner that the conditions will be fulfilled; and when that is done, when it is certainly known that such a ease has arisen, the rule may be applied without punishing a man for disease. That is, when we ean certainly know that although the false belief on which the prisoner aeted was the product of mental disease, still that the mind was in no other way impaired or affected, and that the molive to the act did certainly take its rise in some portion of the mind that was yet in perfect health, the rule may be applied without any apparent wrong. But it is a rule which ean safely be applied in practice that we are seeking; and to say that an act which grows wholly out of an insane belief that some great wrong has been inflicted, is at the same time produced by a spirit of revenge springing from some portion or corner of the mind that has not been reached by the disease, is laying down a pathological and psychological fact which no human intelligence can ever know to be true, and which, if it were true, would not be law, but pure matter of fact. No such distinction ever can or ever will be drawn into practice; and the absurdity as well as the inhumanity of the rule seems to me sufficiently apparent without further comment. . . . It is a question of fact whether any universal test exists, and it is also a question of faet what that test is, if any there be."\*

Since the answers of the judges were made to the House of Lords the law as relating to insanity in a criminal trial has been laid down in conformity with

<sup>\*</sup> State v. Jones, p. 388.

their conclusions: if the accused person at the time of committing the offence knew right from wrong, and that he was doing wrong, he must be brought in guilty, whether insane or not. If insane, he is not necessarily exempted from the punishment of his crime; the question is, whether he was at the time capable of committing a crime; and that must be determined by evidence of the absence, not of insanity, but of a knowledge of right and wrong. Was his insanity of such a kind as to render him irresponsible by destroying his knowledge of right and wrong? Nevertheless, juries often, and judges occasionally, out of a natural humanity repudiate this dogma in particular cases, and so far from any certainty of result having been secured by its application, it is notorious that the acquittal or conviction of a prisoner, when insanity is alleged, is a matter of chance. Were the issue to be decided by tossing up a shilling, instead of by the grave procedure of a trial in court, it could hardly be more uncertain. The less insane person sometimes escapes, while the more insane person is sometimes hanged; one man labouring under a particular form of derangement is acquitted at one trial, while another having an exactly similar form of derangement is convicted at another trial. No one will be found to uphold this state of things as satisfactory, although there is great difference of opinion as to the cause of the uncertainty; the lawyers asserting that it is owing to the fanciful theories of medical men who never fail to find insanity where they earnestly look for it, the latter protesting that it is owing to the unjust and absurd

criterion of responsibility which is sanctioned by the law. Meanwhile, it is plain that, under the present system, the judge does actually withdraw from the consideration of the jury some of the essential facts, by laying down authoritatively a rule of law which prejudges them; the medical men testify to facts of their observation in a matter in which they alone have adequate opportunities of observation; the judge, instead of submitting these facts to the jury for them to come to a verdict upon, repudiates them by the authority of a so-called rule of law, which is not rightly law, but is really false inference founded on insufficient observation.

In America it would seem that matters have been little better than they are in this country, the practice of the courts, like that of the British courts, having been diverse and fluctuating. In many instances juries have been instructed, in accordance with English legal authorities, that if the prisoner, at the time of committing the act, knew the nature and quality of it, and that in doing it he was doing wrong, he must be held responsible, notwithstanding that on some subjects he may have been insane: that in order to exempt a person from punishment insanity must be so great in extent or degree as to destroy his capacity of distinguishing between right and wrong in regard to the particular act. But in other instances the instructions of the judges have been different. In the case of State v. Wier, Grafton 60. 1864, Chief Justice Bell charged the jury thus :-

"The evidence must satisfy the jury that the party at the time of committing the act in question was insane, and that the

disease is of such severity that the person is incapable of distinguishing between right and wrong in that particular case, or of controlling the sudden impulse of his own disordered mind; or, as the same rule has been laid down by an eminent judge, a person, in order to be punishable by law, must have sufficient memory, intelligence, reason, and will, to enable him to distinguish between right and wrong in regard to the particular act about to be done, to know and understand that it will be wrong, and that he will deserve punishment by committing it; to which I add sufficient mental power to control the sudden impulses of his own disordered mind, . . . I have been accustomed to regard as the distinguishing test of insanity the inability to control the actions of a man's mind. . . . The power of the control of the thoughts being lost, the power of the will over the conduct may be equally lost, and the party under the influence of disease acts not as a rational being, but under the blind influence of evil thoughts which he can neither regulate nor control. It was, perhaps, not without reason that in ancient times the insane were spoken of as possessed with an evil spirit, or possessed with a devil, so foreign are the impulses of that evil spirit to all the natural promptings of the sane heart and mind."\*

In the case of Stevens v. the State of Indiana, the instruction to the jury that if they believed the defendant knew the difference between right and wrong in respect of the act in question, if he was conscious that such act was one which he ought not to do, he was responsible—was held to be erroneous.

It would appear, then, that the American courts which, having inherited the Common Law of England, at first followed docilely in the wake of the English courts, are

<sup>\*</sup> Quoted in the Report of State v. Jones, pp. 376, 377.

now exhibiting a disposition to emancipate themselves from an authority which they perceive to be founded on defective and erroneous views of insanity, and a desire to bring the law more into accordance with the results of scientific observation. The decisions of the Court of New Hampshire in Boardman v. Woodman, State v. Jones, and State v. Pike, are especially worthy of attention for their searching discussion of the relations of insanity to jurisprudence, and for the decisive abandonment of the right and wrong test of responsibility. In the case of State v. Pike, Chief Justice Perley instructed the jury that they should return a verdict of not guilty "if the killing was the offspring of mental disease in the defendant; that neither delusion nor knowledge of right and wrong, nor design or cunning in planning and executing the killing, and in escaping or avoiding detection, nor ability to recognise acquaintance, or to labour or transact business or manage affairs, is, as a matter of law, a test of mental disease; but that all symptoms and all tests of mental disease are purely matters of fact to be determined by the jury."

"A striking and conspicuous want of success," said Judge Doe in the same case, "has attended the efforts made to adjust the legal relations of mental disease. . . . It was for a long time supposed that men, however insane, if they knew an act to be wrong, could refrain from doing it. But whether that suspicion is correct or not, is a pure question of fact; in other words, a medical supposition,—in other words, a medical theory. Whether it originated in the medical or any other profession, or in the general notions of mankind, is immaterial. It is as

medical in its nature as the opposite theory. The knowledge test in all its forms, and the delusion test, are medical theories introduced in immature stages of science, in the dim light of earlier times, and subsequently, upon more extensive observations and more critical examinations, repudiated by the medical profession. But legal tribunals have claimed these tests as immutable principles of law, and have fancied they were abundantly vindicated by a sweeping denunciation of medical theories—unconscious that this aggressive defence was an irresistible assault on their own position. . . . In this manner opinions, purely medical and pathological in their character, relating entirely to questions of fact, and full of errors, as medical experts now testify, passed into books of law, and acquired the force of judicial decisions. Defective medical theories usurped the position of common-law principles. . . . Whether the old or the new medical theories are correct, is a question of fact for the jury; it is not the business of the court to know whether any of them are correct. The law does not change with every advance of science; nor does it maintain a fantastic consistency by adhering to medical mistakes which science has corrected. The legal principle, however much it may formerly have been obscured by pathological darkness and confusion, is that a product of mental disease is not a contract, a will, or a crime. It is often difficult to ascertain whether an individual has a mental disease, and whether an act was the product of that disease; but these difficulties arise from the nature of the facts to be investigated, and not from the law: they are practical difficulties to be solved by the jury, and not legal difficulties for the court."\*

These American decisions are certainly an advance on any judgment concerning insanity which has been

<sup>\*</sup> See also p. 441 and following pages for further weighty observations on this matter.

given in this country; they put in a proper light the relations of medical observation and law in questions of mental disease: and it cannot be doubted that future progress will be along the path which they have marked out. The question which will probably be submitted to the jury will be substantially-Was the act the offspring or product of mental disease?—and it will be seen that to lay down any so-called test of responsibility founded on a supposed knowledge of right and wrong, is, as Judge Ladd remarked in State v. Jones, "an interference with the province of the jury, and the enunciation of a proposition which, in its essence, is not law, and which could not in any view safely be given to the jury as a rule for their guidance, because, for aught we can know, it may be false in fact." Seeing, then, that by the unanimous testimony of medical men of all countries who have been practically acquainted with insanity, it is declared positively that such a proposition is false in fact, it is clear that the law, in enunciating it, is not only overstepping its rightful function, but actually perpetrating an injustice. It is simply doing in regard to insanity what it did formerly in regard to witchcraft—giving erroneous opinions on matters of fact to the jury under the name of law, and with all the weight of judicial authority. In one of the latest trials for witchcraft in this country, Lord Hale, whose crude dicta concerning insanity were so long acted upon in our courts of justice, instructed the jury -"That there are such creatures as witches he made no doubt at all. For, first, the Scriptures had affirmed

so much. Secondly, the wisdom of all nations had provided laws against such persons, which is an argument of their confidence of such a crime." The jury accordingly found a verdict of guilty; the judge, satisfied with it, condemned the prisoners to death, and they were executed. It was one of the last executions for witchcraft in this country, for it occurred at a time—and this should never be forgotten—when the belief in witchcraft was condemned by the enlightened opinion of the country. As it was then with witchcraft, so it is now with insanity: the judge instructs the jury wrongly on matters of fact; they find accordingly a verdict of guilty; he is satisfied with the verdict, and an insane person is executed.

The falseness of the legal position will appear at once if we suppose a case of poisoning instead of a case of mental derangement: what would be thought of a judge who, when medical evidence of poisoning was given. should instruct the jury as a principle of law that they must be governed in their verdict by the presence or absence of a particular symptom? "If the tests of insanity are matters of law, the practice of allowing experts to testify what they are should be discontinued; if they are matters of fact, the judge should no longer testify without being sworn as a witness and showing himself qualified to testify as an expert."\* But, in truth, the tests of insanity are no more matters of law than are the tests of a poison or the symptoms of disease. "If a jury were instructed that certain manifestations were symptoms or tests of consumption, cholera, con-

<sup>\*</sup> Judge Doe, S'ate v. Pike.

gestion, or poison, a verdict rendered in accordance with such instructions would be set aside, not because they were not correct, but because the question of their correctness was one of fact to be determined by the jury upon evidence." \*

Other nations have not bound themselves by so narrow and ill-founded a criterion of responsibility in insanity; they have refrained from the attempt to define exactly the conditions of responsibility. In France the article of the penal code is-"There can be no crime nor offence if the accused was in a state of madness at the time of the act." And the revised statutes of the State of New York enact, that "no act done by a person in a state of insanity can be punished as an offence." These general enactments, while wisely leaving each case to be decided on its merits, may clearly be construed, if they were not intended, to exempt from punishment the individual who, being partially insane, nevertheless commits a crime which is no way connected with his insanity; who, in fact, so far as can be judged, does it in the same way and from exactly the same motive as a sane person. For an insane person is not exempt from the ordinary evil passions of human nature; he may do an act out of jealousy, avarice, or revenge: is it right. then, when, so far as appears, the passion is not connected with his diseased ideas or feelings, and he acts with criminal intent, that he should escape punishment for what he has done? This is really the important question which must continue to puzzle courts of justice

<sup>\*</sup> Boardman v. Woodman,

when a particular criterion of responsibility is no longer laid down; for if it be admitted that an insane person who apparently does a criminal act sanely ought not to escape punishment, the difficulty of deciding whether his disease did or did not affect the act will remain. There will always be room enough for doubts and differences of opinion.

The section of the latest German penal code is:—
"An act is not punishable when the person at the time of doing it was in a state of unconsciousness or of disease of mind, by which a free determination of the will was excluded." Not every disorder of mind is exempt; only such actual disease as excludes a free determination of the will. The problem then is to determine, first, what conditions of derangement of the mental faculties are to be considered as the result of disease; and, secondly, whether and how far free-will is excluded by them. In the case of a partially insane person acting to all appearances from an ordinary criminal motive, the act must be weighed in relation to these two questions; and if they are answered in the negative, he would clearly be amenable to punishment.

It is abundantly evident from this short review of the codes of other countries that nothing can be said in justification of the superstitious reverence with which English lawyers cling to their criterion of responsibility.\*

<sup>\*</sup> Described by one of the latest German commentators upon it as Ein Irrthum der heutzutage noch in der Englischen Gesetzgebung und Rechtsprechung besteht und unzählige Justizmorde verschuldet hat—an error which at this day still exists in English jurisprudence and has been the cause of countless judicial murders.

It is hard to see why they should suffer a greater pang in giving up this formula than they did in giving up other formulas which, having had their day and done much evil work, were abandoned. The "wild-beast theory," once so sacred, has been relegated to the record of human mistakes; the theory of a knowledge of right and wrong in the abstract which followed it was, in like manner, repudiated as men became better acquainted with the phenomena of mental derangement; surely then the metaphysical theory of a knowledge of right and wrong in relation to the particular offence, which finds little or no favour out of England, and which is condemned unanimously by all persons in all countries who have made insanity their study, may be suffered to join its predecessors, without danger of injury to what all those who approve and those who disapprove it desire—the strict administration of justice. sicians have no right to interfere in the administration of the law, which is the judge's function, nor is it their duty to decide upon what is necessary to the welfare of the state, that being the legislator's work; their concern is with the individual not with the citizen. But they plainly have the right to declare that the nature of a crime involves two elements, first, the knowledge of its being an act contrary to law, and, secondly, the will to do or to forbear doing it, and to point out that there are some insane persons who. having the former, are deprived by their disease of the latter; who may know an act to be unlawful but may be impelled to do it by a conviction or an impulse which they have not the will or the power to resist. Recognising the obvious difference between him who will not and him who cannot fulfil the claims of the law, it is their function to point out the conditions of disease which constitute incapacity, and when they find a false fact solemnly enunciated as a rule of law, to bring forward into all the prominence they can the contradictory instances which their observation makes known to them. "That cannot be a fact in law which is not a fact in science; that cannot be health in law whichis disease in fact. And it is unfortunate that courts should maintain a contest with science and the laws of nature upon a question of fact which is within the province of science and outside the domain of law."\*

## 2. Testamentary Capacity.

Thus much concerning the application of the law to the allegation of insanity for the defence in a criminal trial. When the question before the courts has been one of testamentary capacity, the view taken of the effect of mental derangement has been different from that which has found favour when the question was one of criminal responsibility. Uncertainty and confusion have, however, long prevailed, and it is only quite recently that definite principles have been authoritatively laid down. Formerly, it was held that if a testator, though insane, made a natural and consistent distribution of his property, a lucid interval

<sup>\*</sup> Judge Doe—Boardman v. Woodman. "If it is necessary that the law should entertain a single medical opinion concerning a single disease, it is not necessary that that opinion should be a cast-off theory of physicians of a former generation."—P. 150.

at the moment of making the will might be justly pre-"For, I think," said Sir William Wynne in Cartwright v. Cartwright, "the strongest and best proof that can arise as to a lucid interval is that which arises from the act itself; that I look upon as the thing to be first examined; and if it can be proved and established that it is a rational act rationally done, the whole case is proved." To the same effect are the remarks of Swinburne :- " If a lunatic person or one that is beside himself at some times, but not continually, make his testament, and it is not known whether the same were made while he was of sound mind and memory, or no, then in case the testament be so conceived as thereby no argument of phrenzy or folly can be gathered, it is to be presumed that the same was made during the time of his calm and clear intermission, and so the testament shall be adjudged good; yea, although it cannot be proved that the testator useth to have any clear and quiet intermissions at all, yet nevertheless I suppose that if the testament be wisely and orderly framed, the same ought to be accepted for a lawful instrument. So, on the other hand, if there be any mixture of wisdom and folly, it is to be presumed that the same was made during the testator's phrenzy, even if there be but one word sounding to folly." Thus it might happen, in accordance with this principle, that a man who was acknowledged to be incapable of managing his affairs, would be deemed competent to dispose of his property by will, if the will contained no word "sounding of folly," but seemed "a rational act rationally done." It was presumed that the same integrity and vigour of mind

were not required for an act which might be done quietly and deliberately, at a favourable time, as for the general conduct of life.

The leading case in regard to testamentary capacity, which has had a great authority, was that of Dew v. Clarke, in which Sir John Nicholl, striving to enunciate a definite criterion, said,-" The true criterion-the true test-of the absence or presence of insanity, I take to be the absence or presence of what, used in a certain sense of it, is comprehended in a single term, namely, delusion. Wherever the patient once conceives something extravagant to exist, which has still no existence but in his own heated imagination, and wherever, at the same time, having once so conceived, he is incapable of being, or at least of being permanently, reasoned out of that conception—such a patient is said to be under a delusion, in a peculiar half technical sense of the term; and the absence or presence of delusion, so understood, forms, in my judgment, the true and only test or criterion of absent or present insanity. In short, I look upon delusion, in this sense of it, and insanity to be almost, if not altogether, convertible terms; so that a patient under a delusion, so understood, on any subject or subjects, in any degree, is, for that reason, essentially mad or insane on such subject or subjects, in that degree." He then went on to point out that in the case under consideration the will was the direct, unqualified offspring of the morbid delusion, "the very creature of that morbid delusion put into act and energy," and decided consequently that it was null and void in law. All that the decision actually established was that a disposal of property which was the direct, unqualified offspring of morbid delusion, was null and void. Nevertheless, the decision has often been quoted, as though it laid down the principle that delusion upon any subject, however remote from and unconnected with the subject of the will, was conclusive evidence of unsoundness of mind sufficient to invalidate the will. It is true that Sir John Nicholl declared delusion to be the true and only test of the presence of insanity, and so went out of his way to enunciate a general principle which is not founded on fact, but the actual principle of his decision in the particular case was limited as stated, and cannot be cavilled at. It was this and no more: the direct product of an insane delusion is not a valid will.

The opinion that delusion, however circumscribed, voids a will, although the will can in no way be connected with the influence of it, has been acted upon in some judicial decisions. "Delusion, therefore, when there is no frenzy or raving madness," said Lord Erskine, "is the true character of insanity. In civil cases, as I have already said, the law voids every act of the lunatic during the period of lunacy, although the delusion may be extremely circumscribed, although the mind may be quite sound in all that is not within the shades of the partial eclipse, and although the act to be voided can in no way be connected with the influence of the insanity; but to deliver a lunatic from responsibility to criminal justice, above all, in a case of atrocity, the relation between the disease and the act should be

apparent."\* In the case of Waring v. Waring, the Judicial Committee of the Privy Council, and in the case of Smith v. Tibbett, Lord Penzance, laid down the doctrine that mental unsoundness, though unconnected with the testamentary disposition, destroyed testamentary capacity. In both these cases, however, there was really a general derangement of mind; in both the delusions had influenced the dispositions of property; and in both, as Chief-Justice Cockburn has remarked, "there existed ample grounds for setting aside the will without resorting to the doctrine in question."

The doctrine has since been rejected judicially. This happened first in the case of Boardman v. Woodman, in the Court of New Hampshire, United States. In this case Judge Bartlett charged the jury "that the mere fact of the possession of a delusion may not be sufficient to render a person utterly incapable of making a valid will; that a person of sufficient mental capacity, though under a delusion, may make a valid will: if the will is no way the offspring of the delusion, it is unaffected by it." This ruling, which was confirmed on appeal, has been since followed in this country by the full Court of Queen's Bench, in the case of Banks v. Goodfellow. In the course of an elaborate judgment of the Court which Chief-Justice Cockburn delivered, he said:—

"Every one must be conscious that the faculties and functions of the mind are various and distinct as are the powers and functions of the physical organization. The instincts, the

<sup>\*</sup> Quoted by Dr. Prichard in his work "On the Different Forms of Insanity in Relation to Jurisprudence."

affections, the passions, the moral sense, perceptions, thought, reason, imagination, memory, are so many distinct faculties or functions of the mind. The pathology of mental disease, and the experience of insanity in its various forms, teach us that, while on the one hand all the faculties, moral and intellectual, may be involved in one common ruin, as in the case of a raving maniac, one or more only of these faculties or functions may be disordered, while the rest are left unimpaired and undisturbed; that while the mind may be overpowered by delusions which utterly demoralize and unfit it for the perception of the true nature of surrounding things, or for the discharge of the common obligations of life, there often are, on the other hand, delusions which, though the offspring of mental disease, leave the individual in all other respects rational and capable of transacting the ordinary affairs, and fulfilling the duties and obligations incidental to the various relations of life. . . . No doubt when the fact that the testator had been subject to any insane delusion is established, a will should be regarded with great distrust, and every presumption should in the first instance be made against it. When insane delusion has once been shown to have existed it may be difficult to say whether the mental disorder may not possibly have extended beyond the particular form or instance in which it has manifested itself. It may be equally difficult to say how far the delusion may not have influenced the testator in the particular disposal of his property; and the presumption against a will made under such circumstances becomes additionally strong where the will is, to use the term of the civilians, an inofficious one, that is to say, one in which natural affection and the claims of near relationship have been disregarded. But when in the result the jury are satisfied that the delusion has not affected the general faculties of the mind, and can have had no effect upon the will. we see no sufficient reason why the testator should be held to

have lost his right to make a will, or why a will made under such circumstances should not be upheld. Such an inquiry may involve, it is true, considerable difficulty, and require much nicety of discrimination, but we see no reason to think that it is beyond the power of judicial investigation and decision, or may not be disposed of by a jury directed or guided by a judge."

He does not neglect to point out the obvious necessity of guarding this doctrine by looking carefully to the condition of the mental faculties in any such case:—

"It is essential to the exercise of such a power that a testator should understand the nature of the act and its effects; shall understand the extent of the property of which he is disposing; shall be able to comprehend and appreciate the claims to which he ought to give effect; and, with a view to the latter object, that no disorder of the mind should poison his affections. pervert his sense of right, or prevent the exercise of the natural faculties: that no insane delusion shall influence his will in disposing of his property, and bring about a disposal of it which, if the mind had been sound, would not have been made. Here then we have the measure of the degrees of mental power which should be insisted upon. If the human instincts and affections, or the moral sense, become perverted by mental disease: if insane suspicion or aversion take the place of natural affection, if reason and judgment are lost, and the mind becomes a prev to insane delusions calculated to interfere with and disturb its functions, and to lead to a testamentary disposition due only to their baneful influence, in such a case it is obvious that the condition of the testamentary power fails, and that a will made under such circumstances ought not to stand."

This decision of the Court of Queen's Bench in Banks v. Goodfellow, which practically is that an insane man

may sometimes make a sane will, agrees so far with the older decisions as that the will itself, if appearing to be a rational act rationally done, was held to be evidence of a lucid interval. Obviously, however, the difficulty of deciding whether the will has or has not been influenced by the insanity will sometimes be exceedingly great. For it is not alone the direct bearing of a delusion which should be weighed carefully in such a case, but it will be necessary to take into consideration also the disordered feelings which may be directly or indirectly connected with the delusion, and under the influence of which the will may have been made. Moreover, the deranged feelings may be themselves the offspring of the mental disease without being connected with the delusion; they and it not being related as cause and effect, but being concomitant effects of a common cause. Insanity displaying itself in disordered feelings as well as in disordered thought, it is quite possible that a will might carry no evidence of the bearing of a delusion upon its provisions, and yet might witness to feelings which would have had no existence but for the disease. And it may justly be questioned whether a jury, utterly ignorant of insanity, though directed and guided by a judge, whose knowledge of the disease is commonly no greater than theirs, is the most competent tribunal that could be devised for determining how far an insane delusion has affected the mental functions. They would certainly be in a much better position for coming to a right conclusion if they had for direction or guidance the benefit of a medical knowledge of the disease furnished to them, not by the parties interested in the trial, but in an independent manner by the court.

We must wait for future decisions to learn whether the principle laid down in Banks v. Goodfellow is to govern the making of contracts by partially insane persons, or whether such contracts are to be voided in accordance with the old rule that the law voids every act of the lunatic, although the insanity may be extremely circumscribed, and although the act to be voided can in no way be connected with the influence of the insanity. Meanwhile a partially insane person who gets married, and who has been clever enough to marry without being under the influence of delusion, must remain in doubt whether he is legally married or not.

In concluding this chapter, it may be remarked that by the judgment of the Court of Queen's Bench the law relating to testamentary capacity and the law relating to criminal responsibility are made to agree so far as this-That a partially insane person is competent to make a will or to commit a crime; not being declared incapable in the one case, nor exempted from punishment in the other case, save when the act in question can be shown to be the offspring of the insanity. But they differ in these points: first, that while an insane delusion of which a will is the offspring will invalidate it, an insane delusion of which a criminal offence is the offspring will not invalidate it in all cases; secondly, that while disordered feelings springing from insanity have due weight given to them in estimating the value of a will, no consideration is given to them in a criminal trial; and, thirdly, that

while no special test of civil capacity is enunciated as a legal principle, the whole case being left to the jury to be decided upon its merits, a special test of responsibility is proclaimed as a legal principle in criminal cases. In the United States, some recent decisions have been more consistent with sound law and with the conclusions of medical science.

## CHAPTER V.

## PARTIAL INSANITY.

## I.—Affective Insanity.

Insanity comprises several forms of mental derangement—Variations in the character of the symptoms of each form at different periods of its course—Early symptoms sometimes little marked, but of great significance: examples—Medical observation alone of the early stages of any value: misinterpretation of them by lawyers and others—Usclessness of the capital punishment of insane persons as

an example to others.

Affective insanity: 1. Impulsive insanity. Insane suicidal impulse or suicidal monomania: examples-Pathological nature of the insane impulse: an inability to control it may be accompanied by a consciousness of its morbid nature—Suicidal insanity strongly hereditary: example—Homicidal monomania: examples—Discussion of its nature—Perverted desires and deranged impulses common features in all forms of mental derangement-Symptoms of derangement before an outbreak of homicidal insanity-Latent tendencies may discover themselves for the first time on the occasion of a powerful exciting cause—Conditions precedent of an outbreak: a. the insane neurosis; b. the epileptic neurosis -a. Insane neurosis: with some degree of imbecility - case of Burton: without imbecility, but with manifestation of insane tendencies -case of Alton murderer - The homicidal impulse: was it irresistible or unresisted?—b. Epileptic neurosis: the homicidal mania may precede, take the place of, or follow an epileptic fit-2. Moral insanity: its characteristic features and its causation— Moral alienation often precedes intellectual derangement, and remains after this has passed away; attacks of it may alternate with attacks of regular mania and melancholia-Folie circulaire-Moral alienation in connection with epilepsy-Congenital moral imbecility-Conclusion.

It may seem quite superfluous to declare that insanity is disease; but it is very far from being superfluous to

set forth what is involved in that assertion. In the first place, insanity does not mean one disease to be diagnosed by a single mark, but a variety of diseases, each of which has its more or less characteristic features, its special course, and more or less special cause, and its particular termination. For some purposes it may be enough to say generally that a person is insane, but such a vague statement is not scientific; for medical purposes it is necessary to know under what form of mental derangement he labours. In the second place, each form of mental derangement has, like other diseases, its premonitory symptoms marking what might be called its stage of incubation, its early symptoms, variations in its course, and a termination which, according as it is good or bad, will be indicated by the different character of the symptoms. We must be prepared therefore for great variations both in the intensity and character of the symptoms at different periods, and by no means expect to observe in all cases a steady course up to a certain intensity, and then a steady decline. These variations are expressed by such terms as intermittent, remittent. periodic, which are applied to the different forms, according to their varying phases; particular symptoms, that is, particular insane ideas, feelings and acts, often marking each phase of the disease. It will be necessary. therefore, to take into consideration the whole course and symptoms in any case, and not to conclude hastily either from a single symptom or from a particular phase.

The early symptoms commonly differ considerably from those which are manifested at a later period of the disease; for the most part they are much less marked; they may in fact be such as would by no means indicate to an unskilled observer that the person was the victim of mental alienation in any of its forms. A man, for example, exhibits an unusual depression for which there is no sufficient cause either in his social relations, or in the state of his affairs-no adequate external cause; he takes no interest in his work, and thinks himself incapable of doing it, although other persons can see no reason why he cannot do it, or do not perceive that, when he makes the attempt, he does not do it as well as formerly; he is moody and low, perhaps sleepless at nights, or tormented with vivid dreams during snatches of unrefreshing slumber; but he has no delusion, nor is there anything irrational in his conversation—he may discuss with intelligence his own affairs, and even his own condition. Nevertheless, these symptoms are the early symptoms of a mental disorder which, in its further course, may issue in positive delusion of thought, or in suicidal or homicidal violence. It is, indeed, from the gloomy depths of a mind in this melancholic state that desperate impulses to suicide or homicide often spring; and it is by persons in this state of mental suffering that many of the suicides and some of the homicides which are recorded almost daily in the newspapers, are done.

Take another instance:—A young lady, from sixteen to twenty years of age, begins to exhibit some unaccustomed peculiarities; becomes fanciful about her health, or about the state of her feelings, believing that she is

not living up to the ideal which she ought to reach and maintain; cannot apply herself steadily to her pursuits in life, or to the pleasures which are her pursuits; spends much time alone in meditation or prayer, or in what passes for meditation or prayer; and perhaps becomes capricious in her behaviour to her relations about her; they meanwhile see nothing to demand medical attention, or, if they notice anything strange, perhaps think to benefit her by the advice of some clergyman. These are, however, the early symptoms of a form of mental derangement, which, if not checked by suitable treatment, is not unlikely to increase, and to pass soon into an incurable state. How often does it happen to the physician in active practice to be consulted about the evident insanity of some such patient, whose friends express the utmost surprise that she should so suddenly have fallen into so sad a state! Ignorant of the meaning of the early symptoms which had been exhibited for some time in an obscure and, so to speak, capricious way, they have overlooked them entirely, or have considered them of small importance, and have only awakened to the serious state of matters when the disease was beyond the possibility of mistake, and perhaps beyond the possibility of cure. It is needless to multiply examples; for it is obvious that the early symptoms of disease may be such as would not lead an unskilled observer to suspect that the person was becoming insane, much less to declare that he was insane, when a physician, knowing their true interpretation, would at once recognise their gravity.

It should be borne in mind again that insanity is a disease which, even in its acute forms, has naturally a much longer course than ordinary bodily diseases have; while in them we count duration by hours and days, in it we count rather by weeks and months. As a rule certainly a person does not go mad in a few hours or days; on the contrary, he may take several weeks or months before he is clearly deranged. Now if while in this early stage of his disease he do some act which brings the question of his state of mind into a civil or criminal court, there may be occasion for much dispute concerning it. Lawyers, maintaining that he knew quite well what he was doing, will assert his entire responsibility; the physician, recognising the first symptoms of an approaching derangement, familiar by experience with its occasional sudden exacerbations, and its reasoning unreason, and knowing how little power of control there may be over the suddenly arising morbid ideas or impulses, may probably uphold his irresponsibility. The one looks simply to the act itself, and to the evidence of consciousness in its execution, deriving its motive from the experience of the workings of a sane mind, and inferring malice aforethought; the other looks to the antecedent symptoms of disease, and to the loss of power of will which may be occasioned thereby, deriving his interpretation of the act from his experience of the workings of an unsound mind. Doubtful cases difficult of decision cannot fail to occur from time to time; cases which the physician, when he is obliged to give a name to them, is driven to call examples of partial insanity,

moral insanity, homicidal mania, kleptomania, and the like; whereupon his testimony is subject to the easy retort that such kind of mania will be best treated by legal punishment—by the prison or the scaffold. The retort may be effectual for the moment, but it is neither humane nor just. If the person be suffering from disease which lessens or destroys his power of self-control, it is manifestly not justice to him to treat him as if he were free from disease and were a completely responsible agent. So far as he is concerned, he has surely the right to claim the privilege of his disease, and the compassion which attaches to affliction in civilized lands.

This, however, may be admitted by those who take the legal view, and vet at the same time the punishment may be defended in the supposed interests of society. Human justice, it will be said, cannot pretend or attempt to apportion the exact measure of an individual's responsibility; it is only above that the act in its true nature lies; here below we must rest satisfied practically with a rough standard of justice, looking in its application to the great interests of society, and must inflict punishment in order to deter others from crime. An English judge, in sentencing a prisoner to death for sheep-stealing when death was the punishment inflicted with the object, but without the effect, of deterring persons from stealing sheep, is reported to have said :- "I do not sentence you to be hanged for stealing sheep, but in order that sheep may not be stolen." And another English judge, who is still on the bench, when sentencing to death for murder a madman on whose behalf insanity had been unsuccessfully pleaded, said that he was not sure whether it was not more necessary to hang an insane person than a sane person. The opinion, barbarous as it seems, was evidently based upon the belief that it was most necessary in the interests of society to deter insane persons from doing murder, and that the execution of them would act as a warning to other madmen, and so deter them, if not from going mad, at any rate from doing murder when they were mad. If this were so, it would be a matter of just surprise that the practice of confining lunatics in asylums has not availed to deter them from going mad, by acting as an effectual warning to all who were inclined that way, to forbear doing that which may subject them to a fate which they dread so much. The judge's dictum evinces an exclusive regard to the interests of society as against the wrongdoer; it ignores entirely the real nature of insanity as a disease, for which the victim is certainly not altogether responsible, and which may render him irresponsible for what he does :-

"Was't Hamlet wrong'd Laertes? Never, Hamlet: If Hamlet from himself be ta'en away,
And when he's not himself does wrong Laertes,
Then Hamlet does it not, Hamlet denies it.
Who does it then? His madness; if't be so,
Hamlet is of the faction that is wronged;
His madness is poor Hamlet's enemy."

Were one half the lunatic population of the country hanged, the miserable spectacle would have no serious effect upon the remaining half, and assuredly would not deter a single insane person from doing murder, any

more than convulsions would be prevented from occurring henceforth by hanging all persons who fell into convulsions. If a boy in school were wilfully to pull faces and to make strange antics, the master might justly punish him, and the punishment would probably deter other boys from following his example, but it would have no such deterrent effect upon the boy whose grimaces and antics were produced against his will by chorea; on the contrary, it would most likely aggravate them. The one is a proper object of punishment; the other is a sad object of compassion, whom it would be a foolish and cruel act to punish. So it is with the allied disease, insanity: to execute a madman is no punishment to him, and no warning to other madmen, but a punishment to those who see in it, to use the words of Sir E. Coke, "a miserable spectacle, both against law, and of extreme inhumanity and cruelty, and which can be no example to others." And as the practice of hanging sheep-stealers did not prevent sheep-stealing, but, being one "of extreme inhumanity and cruelty," brought the law into discredit by offending the moral sense of mankind, so likewise the practice of hanging madmen will not really deter insane persons from doing murder, but must in the end inevitably bring the law which sanctions it into contempt.

The argument in favour of hanging madmen in order to deter others from crime must then be pronounced utterly baseless; the execution of them would be of use only if it deterred persons from going mad, which no one has asserted that it does; but the argument that it is necessary to execute them in order to

protect society would be incontrovertible if society had no other effectual means of protecting itself. But this is not so: it has the power of protecting itself effectually, and at the same time of inflicting upon the insane wrong-doer what he assuredly regards as a heavy punishment, by shutting him up in a lunatic asylum. There need be no fear that the prospect of such a fate would be less deterrent to him than the prospect of death on the scaffold.

It will be observed that I have spoken of the punishment of death as one which should never be inflicted upon an insane person; it is another question whether such a person should not be otherwise punished under any circumstances. Abolish capital punishment, and the dispute between lawyers and doctors ceases to be of practical importance. There can be no doubt that the insane inmates of asylums are to some extent deterred from doing wrong and stimulated to exercise self-control by the fear of what they may suffer in the way of loss of indulgence or of the infliction of a closer restraint if they yield to their violent propensities. But it is equally certain that these motives can only be acted upon in a very cautious way, and that if the strain put upon them be too great, the patient is made worse and all control over him lost. It is certain too that a patient who may one day be amenable to such motives may on another day, in consequence of a different phase in his disease, be altogether beyond the reach of moral influence. I do not see, therefore, how it can justly be maintained that an insane person should be subjected to any sort of punishment to the same degree as a sane person, or how it can be justly argued that he should in any case be under penal rather than under medical control.

I have said that the period during which insanity is coming on, when its symptoms are, as it were, premonitory of the actual disease, may be long protracted in some cases. It is no easy matter at times to fix the beginning of the degeneration, so far back may it go in the life of the individual; for when we push close inquiries into the early histories of insane patients we may chance to discover peculiarities of childhood which would appear to warrant the belief that the foundations of the disease had been even then laid, and that its outbreak was the final explosion of a long train of antecedent preparations. This is no doubt scientifically true of a great many cases, but practically we are able to distinguish symptoms which actually mark disease from peculiarities and eccentricities which have not reached the character of symptoms. Now if a person were to present for some length of time a class of symptoms such as are commonly the immediate forerunners of positive mania, he would most likely be described as suffering from moral insanity or from some form of partial mania. He might or he might not pass ultimately into a complete derangement: but so long as he did not, he would be one of those persons whom physicians are sometimes charged with creating out of the depths of their consciousness. Let it be clearly understood that the features of some of these obscure and questioned forms of partial insanity are exactly those which are exhibited sometimes in the early

stages of a genuine attack of complete insanity; these premonitory stages presenting, as it were, an abstract and brief chronicle of them. There is no unwillingness to reckon them disease when they are followed soon by an outbreak of violent mania: why should there be any hesitation to account them evidence of disease when no such immediate outbreak follows to give them an unmistakable interpretation? Not every inflammation passes into suppuration or gangrene, but it is none the less inflammation because it stops short of its worst stages. In any case, it can be hardly right to reject the testimony of a skilled observer with regard to an accused person's mental state, and then by hanging him before the progress of his disease can justify the skilled testimony, to cut off the opportunity of rectifying the mistake.

I shall proceed then to consider the medico-legal relations of these varieties of partial insanity; for the discussion of them will raise the difficult and doubtful questions of responsibility upon which law and medicine are in conflict. All writers on mental derangements, whatever theories they may hold with respect to their proper classification, are compelled by observation of instances to describe certain varieties in which there is no delusion—an insanity mainly of feeling and conduct. Thus, of the two great primary divisions of melancholia and mania, they recognise a melancholia simplex or melancholia without delusion, and a mania sine delirio or mania without delusion: These varieties have really an importance out of proportion to their apparently simple character, for it is in them that dangerous impulses to

homicide or suicide or other destructive acts are especially apt to occur; and it is when a person labouring under one of them perpetrates some act of violence, before he has developed any delusion or incoherence of thought, that an angry conflict of opinion rages through the country. Now as the main difference between melancholia without delusion and mania without delusion is, that there is marked mental depression in the former and no notable depression in the latter, it will be most convenient for our present purpose to consider them together under the common name of Affective insanity—that is, Insanity without delusion, or Insanity of feeling and action. The two chief subdivisions of this class (which I propose to make) are Impulsive insanity and Moral insanity.\*

I do not forget that the lawyers have declared delusion to be the test of insanity, but that is a doctrine which, in common with other physicians who know anything of insanity, I do not hesitate to pronounce erroneous. In the first place, there may be insanity without delusion, as I have already said; and, in the second place, when delusion is present its value as a symptom of insanity may vary much. Some delusions appear to be little more than unfounded and extreme suspicions; jealousy on the part of husband or wife, religious apprehensions, the delusion that friends and children are unkind or actually

<sup>\*</sup> In adopting these divisions I would guard against being supposed to propound them as a classification of insanity. Insane impulses and moral alienation are met with in various forms of mental disease. I use the divisions as a convenient method of raising and discussing the medico-legal questions.

conspiring to injure the individual, are certainly not by themselves proofs of insanity, although they may become weighty evidence when associated with other symptoms of disease which give them their true interpretation. The absence of delusion will not disprove, nor will the presence of delusion always prove, insanity.

## 1. Impulsive Insanity.

It will be a hard matter for those who have not lived among the insane and so become familiar with their ways and feelings to be persuaded, if, without such experience, they ever can, that a man may be mad and yet be free from delusion and exhibit no marked derangement of intelligence. Nevertheless it is a fact that in a certain state of mental disease a morbid impulse may take such despotic possession of the patient as to drive him, in spite of reason and against his will, to a desperate act of suicide or homicide; like the demoniac of old into whom the unclean spirit entered, he is possessed by a power which forces him to a deed of which he has the utmost dread and horror; and his appeal sometimes to the physician whom he consults in his sore agony, when overwhelmed with a despair of continuing to wrestle successfully with his horrible temptation, is beyond measure sad and pathetic.

Suicidal Insanity.—The most anxious cases with which those have to do who are engaged in the care and treatment of the insane, are unquestionably those in which there is a persistent suicidal impulse, it may be without appreciable disorder of the intellect. The patient is

quite aware of his morbid state, deplores it, struggles against the horrible temptation, but in the end, unless very closely watched, is hurried into suicide by it. Of course such a person is depressed because of his state, feels no interest in his usual pursuits, and cannot follow them; everything is swallowed up in the absorbing misery of his temptation; but he is under no delusion. his intellect is clear; he can reason about his condition as well as any one else can; his knowledge of right and wrong in regard to the act is most keen. Nevertheless his intellect is at times so completely the slave of his morbid impulse that it is constrained to watch for opportunities and to devise means to carry it into effect. No one who had not seen it could believe what ingenuity there may be in planning and what determination in executing a deed which all the while is reprobated as most wicked. Many examples of this form of derangement might be quoted from writers on insanity; but I shall content myself with mentioning two cases which came under my own observation.

A married lady, thirty-one years of age, sprung from a family in which there was much insanity, was, a few weeks after her confinement, seized with a strong and persistent suicidal impulse, without delusion or disorder of the intellect. After some weeks of zealous attention and anxious care from her relatives, who were all most unwilling to send her from home, it was found absolutely necessary to send her to an asylum; so frequent, so cunningly devised, so determined were her suicidal attempts. On admission she was very wretched

because of the frightful impulse with which she was possessed, and often wept bitterly, deploring the great grief and trouble which she caused to her friends. She was quite rational, even in her horror and reprobation of the morbid propensity; all the fault that could be found with her intellect was that it was enlisted in its service. Nevertheless, her attempts at suicide were unceasing. At times she would seem quite cheerful, so as to throw her attendants off their guard, and then would make with quick and sudden energy a precontrived attempt. On one occasion she secretly tore her night-dress into strips while in bed, and was detected in the attempt to strangle herself with them. For some time she endeavoured to starve herself to death by refusing all food, and it was necessary to feed her with the stomaclipump. The anxiety which she caused was almost intolerable, but no one could grieve more over her miserable state than she did herself. After she had been in the asylum for four months, there appeared to be a slow and steady improvement, and it was generally thought, as it was devoutly hoped, that she would make no more attempts at self-destruction. Watchfulness was somewhat relaxed, when one night she suddenly escaped out of a door which had been carelessly left unlocked, climbed over a high garden wall with surprising agility, and ran off to a reservoir of water into which she threw herself headlong. She was rescued before life was quite extinct; and after this all but successful attempt she never made another, but gradually regained her cheerfulness and love of life, and finally left the establishment in her right mind. In face of this example of uncontrollable morbid impulse, with clear intellect and keen moral sense, what becomes of the legal criterion of responsibility?

A gentleman of middle age, and of ample means, happily married, but sprung from a family in which other members had been insane, and who, before marriage, had lived a dissipated life, and was now suffering from the enervating effects of his excesses, became the victim of desperate suicidal insanity. He had once before had a similar attack from which he had recovered in a few months. On this occasion he was terribly distressed and depressed by reason of the impulse to destroy himself-there was no other cause of depression-but at the same time declared calmly that he must do it. and that he should have done it before this if he had not been a coward. To all attempts to comfort him by the assurance that it would pass away, as it had done on a former occasion, he smiled incredulously, repeating the declaration that he must do it. He had been recommended to travel for change of scene, but as he had attempted to throw himself overboard while at sea. he was brought back home and placed under special care. He continued, however, in the same hopeless and despairing state of mind, protesting calmly that he must do it, that he was disgraced and dared not look people in the face because of his cowardice in not doing it; and all this so quietly that it was hardly possible to think that he really meant what he said. Nevertheless, one morning he eluded the vigilance of his attend-

ant, ran off as fast as he could across hedges and ditches, closely but vainly pursued, to a railway, clambered up a high embankment, and deliberately laid himself down across the rails in front of a passing train, which killed him on the spot. Except that this unfortunate gentleman had the insane suicidal impulse, and thought himself a disgraced man, who never could hold up his head again because of his cowardice, he was in all respects apparently sane.

These two instances, which might be paralleled by many similar ones, will serve to show how limited the mental derangement may seem to be in what we call suicidal mania or monomania. I say seem to be because there is reason to believe, as will be seen subsequently, that there is sometimes really more derangement in this monomania, and in other forms of monomania, than actually appears on the surface. Obviously the whole energy of the mind was absorbed in the morbid function, no interest in the affairs of life was possible, and there was no power left to discharge its duties; the morbid idea dominated thought, feeling, and eventually action. In both cases it will be noted again that there was a strong hereditary predisposition to insanity, although it did not appear that it was a special predisposition to suicidal insanity. The patients. however, had the insane neurosis, which displayed its morbid energy in a convulsive idea, not otherwise than as the epileptic neurosis, to which it is closely allied. displays its morbid energy in convulsive movement. Looking at their mental state from a strictly pathological point of view, it is entirely consistent with experience; for as the function of the motor centres is movement, so the functions of the supreme nerve-centres is thought, and as a morbid state of the motor centres occasions convulsion of movements, so, in like manner, a morbid state of the mind-centres occasions what, for want of a more appropriate term, may be called convulsion of idea. And as the will cannot restrain a convulsive movement, of which the patient may all the while be conscious, so the will cannot always restrain, however much it may strive to do so, a morbid idea which has reached a convulsive activity, although there may be all the while a clear consciousness of its morbid nature.

It is notable how strongly hereditary this suicidal insanity often is, and how desperate are its manifestations under such circumstances, even when there is no other sign of mental alienation. A gentleman of great intellectual power, occupying a high position in his profession, and endowed with remarkable energy, consulted me on three or four occasions on account of sleeplessness, depression, and unusual mental worry about certain matters of business when there was not adequate occasion for it. He was perfectly clear in his intellect, understood thoroughly all his affairs, and talked as sensibly as any one else could have done of his own condition. The idea of suicide had arisen at times in his mind, but he had resisted it as contrary to his religious principles and to his judgment. If any one had asked me if I thought him a likely man to commit suicide, I should have replied that his strength of character and his

intellectual power were so great as to render it improbable. Nevertheless he left his house one day, hastened to one of the bridges over the Thames, and, after walking backwards and forwards over it several times, threw himself from it into the river. He was rescued, did not suffer at all from the consequences of his desperate leap, and finally recovered his health and spirits. His mother had laboured under suicidal propensities, and during the last years of her life it had been necessary to fasten down the windows of her house, in order to prevent her from throwing herself out of one of them. His brother, a sensible and successful man of business, would never travel by train if he could help it, and never on any occasion by express train, because of a strong impulse which he felt to throw himself out of the carriage.\*

The suicidal propensity is inherited like the tricks of movements which run in families: it may be latent or dormant while the individual is strong and healthy, and all things are going well with him; but if his nervous energy be exhausted, and the tone of his system depressed

<sup>\*</sup> In illustration of the known desperate character of suicida mania and of its hereditary causation, I may mention the case of an accomplished young lady who was under Dr. Conolly's care in his house, and regarding whom the final note is as follows:—"Seems to be almost constantly meditating suicide. After appearing cheerful for a time she will urgently entreat the attendants to let her have a knife... Long observation of her, and knowledge of this peculiar tendency having shown itself in her mother and in two or three other relatives, make her suicide so much to be apprehended that her friends are recommended to remove her to an asylum where there are more patients, and where the arrangements are more adapted for cases of unusual difficulty or danger." This was done; and three months afterwards she put an end to her life by hanging.

by any cause, then it springs into activity, and may display itself in a convulsive energy. In this state it seems as if it were independent of the operations of the mind, which is otherwise rational, as if it were a demon that had taken possession of the man, and ruled him in spite of reason and will. Suggestion has often a great influence in exciting it into activity: the accounts of suicides in the newspapers are either avoided anxiously as being too powerfully suggestive, or they exert a singular attraction, and are perused with a morbid interest; the idea becomes familiar to the mind, the horror of it wears off, and when there is melancholic depression it presents itself in a vivid form, and is readily carried into effect. The suicide of a relative or friend has a still more powerful infective effect. In the event of a person afflicted with this form of mental disease committing suicide, no one would question his insanity; but there is not the same willingness to recognise disease when the morbid impulse is not suicidal, but homicidal.

Homicidal Insanity.—Nevertheless, it is certain that there is an exactly similar form of homicidal mania or monomania in which the patient is possessed with an impulse to kill somebody, is infinitely miserable in consequence, and yet exhibits no other mental derangement. We owe the description of this form of madness—manie sans délire, as he calls it,—to Pinel,\*

<sup>\*</sup> But long before him Ettmuller (Prox. lib. ii., cap. 4. Op. tom. iii., p. 368) had spoken of it as melancholia sine delirio, a state of mental disorder in which there was recta ratio sine delirio. He even cites two observations of Plater, one of which refers to a mother who had often been tormented with the desire of killing her child; the other, to a

who, believing at first that insanity was inseparable from delirium or delusion, on prosecuting his researches "was not a little surprised to find many madmen who at no period gave evidence of any lesion of the understanding, but who were under the dominion of instinctive and abstract fury, as if the affective faculties had alone sustained injury." He relates the following case in exemplification of these remarks:—

"A man who had previously followed a mechanical occupation, but was afterwards confined at Bicêtre, experienced, at regular intervals, fits of rage, ushered in by the following symptoms. At first he experienced a sensation of burning heat in the bowels, with an intense thirst and obstinate constipation; this sense of heat spread by degrees over the breast, neck, and face, with a bright colour; sometimes it became still more intense, and produced violent and frequent pulsations in the arteries of those parts, as if they were going to burst; at last the nervous affection reached the brain. and then the patient was seized with an irresistible, sanguinary propensity; and if he could lay hold of any sharp instrument, he was ready to sacrifice the first person that came in his way. In other respects he enjoyed the free exercise of his reason; even during the fits he replied directly to questions put to him, and showed no kind of incoherence in his ideas, no sign of delirium; he even felt deeply all the horror of his situa-

woman who was tormented with a desire to utter blasphemies. Both succeeded in resisting their morbid propensities. See De la Folie cons. dans ses Rapports avec les Questions Medico-judiciaires, par C. C. H. Marc, vol i., p. 226.

tion, and was often penetrated with remorse, as if he was responsible for this mad propensity. Before his confinement at Bicêtre a fit of madness seized him in his own house: he immediately warned his wife of it, to whom he was much attached; and he had only time to cry out to her to run away lest he should put her to a violent death. At Bicêtre there appeared the same fits of periodical fury, the same mechanical propensity to commit atrocious actions, directed very often against the inspector, whose mildness and compassion he was continually praising. This internal combat between a sane reason in opposition to sanguinary cruelty reduced him to the brink of despair, and he often endeavoured to terminate by death the insupportable struggle. One day he contrived to get possession of the cutting-knife of the shoemaker of the hospital, and inflicted a severe wound upon himself in the right side of his chest and arm, which was followed by violent hæmorrhage. Strict seclusion and a straitwaistcoat prevented the completion of the suicide."

At one period of his career, Esquirol was disposed to think that most, if not all, the cases which Pinel had described under the name of mania without delirium—manie sans délire, were really examples of ordinary monomania or melancholia, characterised by fixed and exclusive delusion; that there was in fact actual disorder of intelligence. Such was the opinion which he expressed in his article on mania in the Dictionnaire des Sciences Médicales, in 1818, but his subsequent observations compelled him to abandon it, and to declare that although some insane persons committed homicide in consequence

of delusions, hallucinations or illusions, there were unquestionably others who were driven by an instinctive impulse, a blind instantaneous impulse, independent of the will, and who acted without passion, without delusion, without motive. To this condition, the monomanie sans délire of Pinel, he gave the name of monomanie instinctive, distinguishing it, in the first place, from true monomania, monomanie intellectuelle, in which there was delusion, and, secondly, from monomanie affective or moral insanity. is rather unfortunate that the word monomania has thus come to be used in two senses-first, as denoting fixed delusion, and, secondly, as denoting the form of mental derangement in which, without delusion, the patient is possessed with an insane and perhaps irresistible impulse to homicide, suicide, or other act of violence. To avoid the confusion thereby occasioned, I shall speak of the latter under the name of impulsive insanity; avoiding also the word instinctive, that it may not be thought I attribute to man a natural instinct to do murder.

There are very few persons engaged in the study and treatment of insanity who have not, like Esquirol, begun by doubting the existence of cases of real impulsive insanity; there are none who, after having had a large enough experience, have not, like him, been compelled to abandon their doubts. To those who judge by the experience of a sane self-consciousness, and so prejudge the facts, it seems an inconceivable state of mind, or, at any rate, it seems inconceivable that a person in such a state of mind should not have the power to control the insane impulse; to those who form their conclusions from obser-

vation and experience of the facts of the disease, and so interpret them fairly, no doubt of its existence is finally possible. Many examples have been recorded by writers on insanity, but it will be sufficient for my purpose to mention the following cases:—

Not long ago a gentleman, aged 50 years, of great animal vigour and enormous muscular development, who had lived a very energetic life, and visited in the course of his work most parts of the world, but had now for some years retired from active employment, consulted me because of a distressing homicidal impulse with which he was tormented. It was so continually present in his mind, and at times so strong, that he was compelled to live apart from his family, wandering from hotel to hotel. lest he should become a murderer; it varied considerably in intensity, but never entirely disappeared; when in his best state it was an idea which continually occupied his thoughts, without an actual inclination to carry it into effect-a homicidal idea rather than a homicidal impulse; but from time to time it acquired a brief paroxysmal activity, the paroxysms being accompanied by a rush of blood to the head, a sense of fulness and confusion there. a horrible feeling of helplessness, and by violent trembling of the body, which was covered with a profuse sweat. They passed off in a flood of tears, and were followed by exhaustion. The attacks often seized him in the night. when he jumped out of bed in an agony of fear, shuddering so violently that the room shook, while the perspiration poured down his body. Such was his description of his miserable state, the truthfulness of which no one who

listened to his story could have had the heart to doubt, for he burst into tears as he told it and wept bitterly. He was manifestly a person of great decision and energy of character, and he did not exhibit any further evidence of intellectual derangement unless it were a morbid tendency to a groundless suspicion and distrust. Though accustomed to exercise great control over himself in some respects, in one respect he signally failed to do so; for he was addicted to a vice well fitted to damage his nervous system, and in some measure to account for his pitiable state.\*

Many cases of homicidal insanity have been collected and recorded by Marc, in some of which the impulse to kill was not accompanied by any other appreciable disorder of mind. The following is a well-known and oftenquoted example:—

"In a respectable house in Germany, the mistress of

<sup>\*</sup> In my work on the Physiology and Pathology of Mind (2nd Ed., p. 348), I have related the following case: "An old lady, aged seventytwo, several members of whose family had been insane, was afflicted with recurring paroxysms of convulsive excitement, in which she always made desperate attempts to strangle her daughter, who was very kind and attentive to her, and to whom she was much attached. Usually she sat quiet, depressed, and moaning because of her condition, and was apparently so feeble as scarcely to be able to move. Suddenly she would start up in great excitement, and, shrieking out that she must do it, make a rush upon her daughter that she might strangle her. During the paroxysm she was so strong, and writhed so actively, that one person could hardly hold her; but after a few minutes of struggling she sank down quite exhausted, and, panting for breath, would exclaim, 'There, there! I told you; you would not believe how bad I was.' No one could detect any delusion in her mind; the paroxysm had all the appearance of a mental convulsion. It was because of her horrible propensity to an act of which she felt the greatest horror that she was so wretched."

the house, on her return home one day, found her servant, against whom there had never been a complaint, in a state of great agitation; she wished to speak with her mistress alone, when she threw herself down on her knees, and begged permission to leave the house. Her mistress, astonished at such a request, desired to know the reason, and thereupon learnt that whenever the unhappy servant undressed the lady's child, and was struck with the whiteness of its flesh, she felt an almost irresistible desire to rip it up. She feared that she should yield to the impulse, and begged therefore to leave the house. This event," says Marc, "happened twenty years since in the family of the illustrious Baron A. Humboldt, who has permitted me to quote his testimony."\*

Other examples of a similar kind are quoted by Marc:—
"A young lady whom I have examined in one of the asylums of the capital, experienced homicidal desires for which she could not assign any motives. She was not irrational on any point, and on each occasion when she felt the fatal propensity recur and mount up, she burst into a flood of tears, and prayed that she might be put in the straitwaistcoat, which she kept on patiently until the attack, which sometimes lasted several days, had passed off." †

"Mr. R., a distinguished chemist and a poet, of a naturally mild and sociable disposition, placed himself under restraint in one of the maisons de santé of the Faubourg St. Antoine. Tormented with a homicidal impulse, he prostrated himself at the foot of the altar,

<sup>\*</sup> Vol. ii., p. 101.

<sup>+</sup> Vol. ii., p. 102.

and implored the Divine assistance to deliver him from the atrocious propensity, of the cause of which he could give no account. When he felt himself likely to yield to the violence of it, he hastened to the head of the establishment, and requested him to tie his thumbs together with a ribbon. This slight ligature was sufficient to calm the unhappy R., who subsequently endeavoured to kill one of his friends, and finally perished in a fit of maniacal fury."

"A woman, never insane enough for confinement, told me," says Dr. Conolly,\* "that she sometimes lay awake in the night looking at her husband, and thinking how easily she might kill him with the broom-handle; and that she awoke him that his talking to her might drive these thoughts out of her head."

Esquirol relates the following case among other cases more or less like it:—"A country gentleman, about forty-five years of age, in easy circumstances, and enjoying good health, came to consult me, accompanied by a young medical man. He gave me the following details:—There was no indication of the slightest disorder of reason in him; he answered with precision all my questions, which were numerous. He had read the indictment of Henriette Cornier, without, however, having given much attention to it. Nevertheless in the night he awoke suddenly with the thought of killing his wife, who was lying by his side. He left his bed, and walked up and down the room for an hour after which, feeling no more disquietude, he lay down

<sup>\*</sup> Croonian Lectures, p. 92.

and went to sleep; three weeks afterwards the same idea occurred on three occasions, always in the night. During the day he took plenty of exercise, occupied himself with his numerous affairs, and had only the remembrance of what he had felt in the night. He had been married twenty years, had always enjoyed good health, was in prosperous circumstances, and had never had the least disagreement with his wife, to whom he was attached. It is an idea which seizes upon him during his sleep. He is sad and troubled about his condition, has left his wife from the fear that he might yield to his propensity, and is very willing to do everything to deliver himself from his dreadful affliction."\*

These cases, to which many more of a like nature might be added, are of great psychological interest, for which reason I have quoted them in the words of their narrators. Whatever difference of opinion there may be concerning the interpretation of them, no one can question the competency of the observers or the accuracy of their description of the facts. It may no doubt be fairly argued that a person is not to be counted insane simply because the idea of killing another person comes into his mind, more especially when he recognises its atrocity and abhors it; but when he cannot dismiss it from his thoughts, although he feels keenly its enormity; when it is directed against some one against whom he has not the least animosity, perhaps against some one near and dear to him; when he is truly possessed by it, so that he is in an agony of fear lest he

<sup>\*</sup> Esquirol, Des Maladies Mentales, vo ii., p. 830.

should yield to its influence, in spite of reason and against his will, and flees from temptation; when he is weary of his life because of its malign power over him, and perhaps commits suicide that he may not commit homicide; then surely it must be acknowledged that his mental functions are not sound, but diseased. certainly does all a man can do to prove that he is not an impostor when he kills himself to prevent a worse consummation, or when, as one of these patients did, he subsequently dies raving mad. The fact that he does successfully resist the insane impulse by calling up ideas to counteract it, or by getting out of the way of temptation, is assuredly not, as many persons think, and some argue, a proof that he might continue to do so on all occasions. The understanding and the will, like all other organic functions, are subject to fluctuations, and, when disease of mind exists, to very great fluctuations: whether the will shall overcome the morbid impulse, or be overcome by it in the end, is really a question of the degree of the disease; if this increase, as it may well do, from temporary bodily disorder or from other causes, the idea acquires a fatal predominance; it is no longer an idea, the relations of which the mind can contemplate, but a violent impulse, which, swallowing up reflection and will, irresistibly utters itself in convulsive action.

Let us briefly consider then how the matter stands. By the unanimous testimony of all those who have made insanity a practical study it is agreed that instances of irresistible homicidal impulse do occur; that this is a

positive fact of observation, be the explanation of it what it may. The assertion of the existence of such a form of mental disease is opposed, not to common prejudices only, but to the conclusions which any person would be likely to form à priori from a metaphysical philosophy of mind. Public writers and lawyers, therefore, naturally jealous of the application of the doctrine to excuse crime, have rejected and reviled it as a dangerous and absurd medical crotchet; having been probably the more moved to do so because they perceive that, if it be admitted, they will be impotent, by reason of their ignorance of insanity, to put a proper check upon its application. They have acted partly then out of a natural jealousy of its abuse, but partly also, I think, out of bad philosophy; concluding from the observations of self-consciousness in a sane mind as to what passes in an insane mind, they have judged the insane with an unjust judgment. They would have done better if they had founded their opinions of the workings of an unsound mind upon their experience of what passes in a sound mind when dreaming, for there is a large measure of truth in the saying that a madman dreams with his eyes open. Like the dreamer, he is governed by the strangest associations of ideas, and feels himself irresistibly impelled to do what his reason disapproves and his moral feeling abhors, aghast at himself the while.

The medical psychologist, who studies mental function by the physiological method, who judges of the functions of the supreme nerve-centres in man by aid of the generalisations which he has formed regarding their functions in animals, where they have not attained so great a development, and by aid also of the generalisations which he has formed concerning the functions of the lower nerve-centres in man, does not experience the same difficulty in realising the probable state of mind in impulsive insanity, and in conceiving an explanation of it.

Placing insanity in the same category as a nervous disease with chorea, which has not inaptly been called an insanity of the muscles, he perceives that just as a deranged state of the motor centres destroys co-ordination of movements and occasions spasmodic or convulsive muscular action, so a deranged state of the mind-centres destroys the healthy co-ordination of ideas, and occasions a spasmodic or convulsive mental action. In the one case the man is unable to perform his movements correctly, in the other case he is unable to perform his ideas correctly-in both cases they play him evil tricks against his will, though within his consciousness. Thus we reconcile the unanimous experience of skilled observers of impulsive insanity with the generalisations of a positive mental science, which might, in truth, enable us to predicate, apart from experience, that such a form of disease must sometimes occur.

In some of these cases of impulsive insanity little or no mental derangement, apart from the morbid idea or impulse, has been noticed. This is expressly stated and forcibly insisted upon by their narrators; but in most cases I believe it will be found, on an intimate knowledge of the person's feelings and doings, that there

is more derangement than appears on the surface. His whole mental tone is more or less affected, so that his feelings are blunted or changed, the natural interests of life extinguished, and his judgments of his relations to others and of their relations to him somewhat impaired; he is apt to become suspicious of and hostile to those who have been his nearest friends and acquaintances, and may finally get delusions concerning them. Our beliefs, sane or insane, are not the results of reason, but have their roots in that unconscious part of our nature, of the state of which the feelings are the indices. It is from the feelings, too, that the impulses to action spring, the function of the intellect, like that of the steersman at the ship's helm, being regulative, and the insane impulse of the homicidal patient is the deranged offspring of a deranged affective life.

It is surprising sometimes how sane a person may appear who all the while has a greater derangement than was ever suspected, until something happens to elicit the evidence of it. When he withdraws from his accustomed occupations, and lives a gloomy life of retirement, absorbed in himself and in his sufferings, there is no provocation to more general manifestations of insanity. Let the strain of active life, however, be put upon him; let him go about his affairs in the world as other men do, be called upon for judgment and action in the relations of life, and, above all, let the various feelings which it is necessary to subdue and control in intercourse with men be brought into play; it will then oftentimes be made plain that the patent morbid symptom is the result of a funda-

mental derangement which requires only circumstances to bring it forth. Perhaps it has been in some degree owing to the way in which this deep perversion of feeling, this affective derangement, has been overlooked or made of no account, attention having been attracted exclusively to the morbid idea or act, that there has been so great an aversion from the doctrine of impulsive insanity. And yet its impulsive character is of the very essence of insanity; for in all forms of the disease paroxysms of impulsive violence are common features; without assignable motive insane patients suddenly tear their clothes, break windows or crockery, attack other patients, do great injury to themselves: they exhibit unaccountable impulses to walk, to run, to set fire to buildings, to steal, to utter blasphemous or obscene words; wherefore if there be one thing which a large experience of them teaches, it is how impossible it is to foreknow the impulses which may suddenly arise in their minds and to trust them from hour to hour. paroxysmal impulse of homicidal insanity is not singular in its nature; it is singular only in being the prominent or apparently single symptom of the disease.

When there is disease of brain which produces derangement of mind, it is of the nature of the disorder to express itself in all sorts of perverted appetites, instincts, and desires, as well as in perverted ideas. In all large asylums there are inmates who display the most depraved appetites; some who, if not carefully watched, eat with apparent relish grass, frogs, worms, and even garbage of the most offensive kind; others who exhibit depraved and exaggerated manifestations of the sexual instinct;

others in whom there is a perversion or loss of the instinctive love of offspring, so that a mother will neglect, hate, or actually destroy her own child. Even the strong self-conservative instinct, which is at the foundation of love of life, may be perverted, so that an insane person will mutilate himself in the most horrible manner, sometimes apparently from a mere love of the mutilation which he does not seem to feel to be painful. When an organism is out of harmony with the circumstances in which it should live, by reason of internal derangement, its tendencies are to self-extinction, which it would often reach quickly, if it were not carefully guarded from the destructive action of its perverted affinities. Persistent suicidal impulse marks the replacement of the self-conservative by a similar self-destructive impulse. The impulses to burn, to steal, to kill, are in like manner occasional symptoms of deranged nerve-element, and have nothing in their nature more exceptional or surprising than other insane impulses. It is not our business, as it is not in our power, to explain psychologically the origin and nature of any of these depraved instincts; it is sufficient to establish their existence as facts of observation, and to set forth the pathological conditions under which they are produced: they are facts of pathology, which should be observed and classified like other phenomena of disease: they certainly ought not to be repudiated because the acutest psychological analysis is incompetent to explain their origin. The explanation, when it comes, will come not from the mental but from the physical side-from the study of the neurosis, not from the analysis of the psychosis.

Now if it were possible in all cases of homicidal insanity to point to evidence of derangement before the outbreak, there would be infinitely less disinclination to admit the existence of disease. In most of the genuine cases I doubt not that this can and should be done. But if we go on to declare that there cannot be a case of true homicidal insanity save where antecedent symptoms of disease have been observed, we are certainly going farther than we are warranted either by experience or by a priori considerations. For, in the first place, authors of weight and authority maintain positively the existence of such cases-cases where, to use Griesinger's words, "individuals, hitherto perfectly sane and in the full possession of their intellects, are suddenly, and without any assignable cause, seized with the most anxious and painful emotions. and with a homicidal impulse as inexplicable to themselves as to others." In the second place, other diseases as well as other forms of insanity sometimes declare themselves in quite a sudden manner: a man's firs epileptic fit does not give any intelligible warning of its coming; an acute mania sometimes bursts out more suddenly than a thunderstorm in a summer's sky; and even valvular disease of the heart, aortic or mitral imperfection, may first become known by a sudden exertion. No doubt in such cases there has been previous weakness of some sort, not recognisable perhaps until the strain has come which has discovered the flaw; there may have been vague threatenings which have been overlooked or misunderstood. The beginnings of disease are, as a rule, latent or obscure; modern medicine is setting itself patiently to work to trace them out; and now-a-days physicians would hardly be brought to credit the occurrence of acute idiopathic disease in a healthy subject. Let it be borne well in mind, then, that there are latent tendencies to insanity which may not discover the least overt evidence of their existence except under the strain of a great calamity or of some bodily disorder, and that the outbreak of actual disease may then be the first positive symptom of unsoundness; the brain in respect of its mental functions differing not in this regard from itself in respect of its other functions, nor from other organs of the body in respect of their functions.

I shall now, then, proceed to point out what I conceive to be the most important conditions which are precedent of an outbreak of insane homicidal impulse. These are the insane neurosis and the epileptic neurosis, in both which the tendency is to convulsive action. It is in strict accordance with the view taken of homicidal impulse as a convulsive idea springing from a morbid condition of nerve-element, and comparable with a convulsive movement, that it should most often occur where there is hereditary predisposition to insanity; it may be that in some cases there is not, but there can be no doubt that in the majority of cases there is, such a neuropathic state. It is in accordance again with experience that when this neurosis exists, and when the circumstances of life or physiological and pathological conditions put a great stress upon the nervous organization, an outbreak of homicidal impulse should in some instances be the first overt evidence of insanity. Among such physiological

and pathological conditions we reckon the development of puberty with the revolution which takes place then in the mental and bodily economy, pregnancy and the puerperal state, the change of life, irregularities of functions in women, the effects of excessive drinking and of other injurious vice. Not one of these conditions but has occasioned an outbreak of insanity in a person predisposed to the disease; not one of these conditions, furthermore, but has, as the recorded cases show, occasioned an outbreak of homicidal insanity.

The cases of homicidal insanity which have occurred under these conditions may be divided into two classes: the first consisting of those in which there has been some defect of intellect, more or less imbecility of mind; the second consisting of those cases in which, without any manifest intellectual defect, there has been an insane temperament. As an example of the first class I may quote the case of Burton, who was tried at the Maidstone Lent Assizes, in 1863, for murder. It was very simple and very shocking. The prisoner was a youth of eighteen years of age; his mother had been twice in a lunatic asylum, having been desponding, and having attempted suicide; his brother was of weak intellect, silly and peculiar. He himself was of low mental organization, and the person to whom he was apprenticed and others gave evidence that he was always strange, and not like other boys; he "had a very vacant look, and when told to do anything, would often run about looking up to the sky as if he were a maniac;" so that the indentures were cancelled. The prisoner said that he had felt "an

impulse to kill some one;" that he sharpened his knife for the purpose, and went out to find some one whom he might kill; that he followed a boy, who was the first person he saw, to a convenient place; that he knocked him down, stuck him in the neck and throat, knelt upon his belly, grasped him by the neck, and squeezed till the blood came from his nose and mouth, and then trampled upon his face and neck until he was dead. He then washed his hands, and went quietly to a job which he had obtained. He knew the boy whom he had murdered, and had no ill-feeling against him, "only I had made up my mind to murder somebody:" he did it because he wished to be hanged. His counsel argued that this vehement desire to be hanged was the strongest proof of insanity; the counsel for the prosecution, on the other hand, urged that the fact of his having done murder in order to be hanged, showed clearly that he knew quite well the consequences of his act, and was therefore criminally responsible. He was found guilty; and Mr. Justice Wightman, in passing sentence, informed him that he had been "found guilty of a more barbarous and inhuman murder than any which had come under my cognisance during a judicial experience of upwards of twenty years. It is stated," the judge went on to say, "that you laboured under a morbid desire to die by the hands of justice, and that for this purpose you committed the murder. This morbid desire to part with your own life can hardly be called a delusion; and, indeed, the consciousness on your part that you could effect your purpose by designedly depriving another of life, shows that you were perfectly able to understand the nature and consequences of the act which you were committing, and that you knew it was a crime for which by law the penalty was capital. This was, in truth, a further, and I may say a deeper, aggravation of the crime!" When sentence of death had been passed, the prisoner, who during the trial had been the least concerned person in court, said, with a smile, "Thank you, my lord," and went down from the dock, "followed by an audible murmur, and almost a cry of horror from a densely crowded audience." He was in due course executed; the terrible example having been thought necessary in order to deter others from doing murder out of a morbid desire to indulge in the gratification of being hanged.

There are certain circumstances, however, which might well make us pause before accepting the theory of extreme depravity, which was so satisfactory to the judge's mind in Burton's case. His hereditary antecedents, his low mental organization, the previous history of incapacity which made it necessary to cancel the indentures, the insane motive from which he committed the murder, the desperate way in which it was done, or, so to speak, overdone, his conduct immediately afterwards, the readiness with which he told all about it, his indifferent behaviour during the trial, and his satisfaction with the sentence—all indicated a state of mind which the fear of capital punishment was not likely to have any good effect upon. There was no need to found a diagnosis of insanity upon the act itself, peculiar as

was its character, nor upon the motive of it, insane as that was; through a chain of circumstances the course of the hereditary disease downwards to its desperate evolution was traceable. Certainly, were it necessary, many cases of acquittal on the ground of insanity might be quoted, in which the evidence of mental derangement was far less than it was in this sad case.

The argument drawn from his knowledge of the nature and consequences of the act which was used by the judge to demonstrate his responsibility, though in strict accordance with English judge-made law, can hardly be considered to answer all the difficulties of the case for what power of choice between right and wrong, and of will to do the one and resist the other, could be justly attributed to one to whom the prospect of the greatest punishment which human justice can inflict, so far from proving deterrent from crime, was actually the incentive to do it? Well might the judge, who, in his sentence of death, "could not trust himself to dwell upon the shocking details," be aghast after a judicial experience of twenty years at this new revelation of the depravity of human nature. Had he considered the matter a little more deeply, he might perhaps have seen reason to question whether the boy's state of mind rendered it possible for him to form such an estimate of the moral character of his act as even the law required. After all, the criminal law supposes some knowledge of moral principles in those whom it regards as fit subjects for punishment; its aim being, I presume. to treat criminals not simply as vermin to be destroyed, but as moral beings to be punished. If the example of Burton's execution was to have a deterrent effect, this effect ought to have been specially exerted upon those who were in a similar state of mind and troubled with similar morbid desires; and yet it is plain that on such persons it would have had a directly opposite effect, and would have stimulated them to do murder, by strengthening the insane motive which instigated it—the desire to be hanged.

This case may be taken as representative of a class. It must be remembered only that the natural defect of intellect may be great or little, and that the insane impulse may not always be homicidal. In some the impulse is suicidal: they kill themselves, without any apparent, or. at any rate, without an apparently sufficient motive, and perhaps at a much earlier age than it is customary for suicide to be done. Others yield to the destructive impulse to set fire to houses, or barns, or other property, without having any ill-feeling against the person whom they thus injure, or any purpose to serve by what they There can be no doubt that the act of violence, whatever it be, in these cases is sometimes suggested by the sensational reports of similar deeds in the newspapers. The example is contagious; the idea fastens upon the weak or depressed mind, and becomes a sort of fate against which it is unable to contend.

As an example of the second class of cases, in which an insane homicidal impulse springs up suddenly without external provocation in the mind of a person who has the insane temperament, I may instance the case of the Alton murderer, who was tried, convicted, and executed a few years ago. He was a clerk in a solicitor's office at Alton, Hampshire. On a fine afternoon he took a walk outside the town, when he met some children playing by the road-side. One of these, a little girl between eight and nine years of age, he persuaded to go with him into an adjoining hop-garden, and the others he got rid of by giving them a few halfpennies to go home. In a little while he was met walking quietly home; he washed his hands in the river on his way, and then returned to his work in the office. As the little girl did not return, search was made in the hop-garden, and the dismembered fragments of her body were found scattered about—a foot in one place, a hand in another, and other parts in different places. Suspicion fell directly upon the prisoner, who was immediately arrested. In his desk was found a diary, and in the diary there was this entry recently made:-"Killed a little girl: it was fine and hot." He had killed the child and cut her body to pieces without other motive than the gratification of an impulse which suddenly came into his mind. There was no indication of insanity in his conversation or conduct after his arrest, nor was any evidence of strangeness in him immediately before the murder given at the trial. But it came out at the trial, where only the semblance of a defence was made, that a near relative of his father was in confinement suffering from homicidal mania, and that his father had had an attack of acute mania. Moreover, it was proved in evidence by independent witnesses that he himself had been unlike other people, that he had been prone to weep frequently without apparent reason, that

he had exhibited singular caprices of conduct, and that it had been necessary at one time to watch him from the fear that he might commit suicide. He was found guilty, condemned to death, and in due course executed-all the newspapers heartily applauding. Nevertheless the features of the murder in this case were of themselves sufficient to produce a conviction in the minds of those who had studied the forms of human degeneracy that there was a strong taint of madness in the murdererthat the disease was at least in the stage of incubation. He was plainly an instinctive criminal, if he were criminal at all: the impulsive character of the crime, the quiet and determined ferocity of it, the savage mutilation, his equanimity immediately afterwards, and his complete indifference to his fate-all these indicated an insane organization, ill-attempered, a discord in nature, which, had it not issued as it did, would, sooner or later, have ended in suicide or in unequivocal insanity.

Similar cases have occurred in which women, under the influence of derangement of their special bodily functions, have been seized with an impulse, which they have or have not been able to resist, to kill or to set fire to property or to steal. The question in all such cases obviously is whether the impulse was really irresistible or whether it was only unresisted; and this is a question which must be answered from a consideration of the facts of the particular case. That the impulse may be irresistible is beyond question. When a woman after her confinement kills her child, whom she loves tenderly, because she cannot help it, there is no serious disinclina-

tion on the part of those who take the legal stand-point to admit that it is not a voluntary act for which she is responsible. The just course would be therefore to abandon a right-and-wrong criterion of responsibility which is contradicted by facts, and from time to time is discredited in practice. That the impulse may be felt and resisted is also a fact which cannot be disputed. is argued, however, by those who support the legal criterion that if the impulse can be resisted, it makes no difference in the responsibility of the person whether it is owing to disease or not, the object of the law being to make people control their evil impulses, whether sane or insane. Of course it is the duty of every one to control an impulse to homicide, even though it spring from disease, and it may perhaps, without much violence, be assumed that every sane person would be likely to do so. seeing that there cannot be supposed to be any real gratification in doing murder purely for its own sake and in being hanged for it; but to conclude in a particular case that an impulse springing from disease might have been resisted and was not, and thereupon to hang the person, is to assume an insight which no mortal has or can pretend to have, and to do, under the sacred name of justice, a deed which may unquestionably be a fearful injustice. The punishment will appear the more iniquitous when we furthermore reflect that the conclusion is based upon a metaphysical test of responsibility which is proved by medical observation to be false in its application to the unsound mind.

Thus much with regard to the insane neurosis in its

relations to impulsive homicidal insanity. The second important condition which it is necessary to consider in relation to this form of mental derangement is the epileptic neurosis. It is a remarkable and instructive fact that the convulsive energy of the homicidal impulse is sometimes preceded by a strange morbid sensation, beginning in some part of the body and mounting to the brain, very like that which, when preceding an attack of epilepsy, is known in medicine as the aura epileptica. Accordingly the sufferer may give a hurried notice of the impending attack, and warn his possible victim to get out of the way. In one of the Annual Reports of the Morningside Asylum, Dr. Skae recorded a striking case, in which the sensation began at the toes, rose gradually to the chest, producing a sense of faintness and constriction, and then to the head, causing a momentary loss of consciousness. It was accompanied by an involuntary jerking, first of the legs and then of the arms, and it was when it occurred that the patient felt impelled to commit some act of violence against others or against himself. On one occasion he attempted to commit suicide; more often the impulse was to attack others. He deplored his condition, of which he spoke with great intelligence, giving all the details of his past history and feelings.\* In other cases a feeling of vertigo, a trembling, and a

<sup>\*</sup> In a subsequent Report, for 1868, Dr. Skae said of this case: "A case of insanity with a strong homicidal impulse, upon which I commented in my Report for 1866, as being strongly allied to epilepsy, although epileptic fits have never as yet been manifested, has undergone an interesting physiological development in the same direction, the patient now having almost daily a vivid spectral hallucination in the

vague dread of something fearful being about to happen, resembling the vertigo and momentary vague fear of one variety of the epileptic aura, precede the attack. Indeed, medical experience teaches that whenever a murder has been committed suddenly, without premeditation, malice, or motive, openly and in a way quite different from the way in which murders are commonly done, we ought to search carefully for evidence of previous epilepsy, or, should there be no history of epileptic fits, for evidence of an aura epileptica and other symptoms allied to epilepsy.

Certainly the most desperate instances of homicidal impulse are met with in connection with epilepsy. The attack of homicidal mania may take the place of the ordinary epileptic convulsions, being truly a masked epilepsy. The diseased action has been transferred from one nervous centre to another, and instead of a convulsion of muscles the patient is seized with a convulsion of ideas. Marc relates the case of a peasant, aged twentyseven years, who had suffered from epilepsy since he was eight years old; but when he was twenty-five years old the character of his disease changed, and instead of epileptic attacks he was seized with an irresistible impulse to commit murder. He felt the approach of his outbreaks for days beforehand sometimes, and then begged to be restrained in order to prevent a crime. "When it seizes me," he exclaimed, "I must kill some

form of a newspaper. He can see it for a short time so distinctly as to be able to read a long paragraph from it. He continues to suffer from the aura epileptica, and other symptoms allied to epilepsy."

one, were it only a child." Before the attacks he felt great weariness, could not sleep, was much depressed. and had slight convulsive movements of his limbs. Ludwig Meyer relates the case of a boy, aged thirteen years, who was subject to periodical attacks of fury, followed by epileptic convulsions, and who often had the furious maniacal excitement without the convulsions.\*

Other cases of a like nature might be quoted from works on insanity, but I shall content myself here with mentioning a case, well deserving to be had in remembrance, which occurred not many years ago in England. The man's name was Bisgrove, and he was sentenced to death, together with a man named Sweet, for murder, the judge being perfectly satisfied with the verdict of the jury. However, after his condemnation, Bisgrove made a confession of the crime, entirely exculpating Sweet from any knowledge of or part in it. The latter accordingly received a free pardon for a crime which he had not committed, and Bisgrove was left for execution. Before this took place a benevolent clergyman, struck with the motiveless and extraordinary character of the murder, made inquiries into his history, the results of which he communicated to the Home Secretary. An illegitimate child, and badly cared for, he had been of weak health and intellect from his youth upwards. For several years he had suffered from frequent epileptic fits, in consequence of which he had been discharged from the colliery at which he worked. In the intervals between the fits, he

<sup>\*</sup> Über Mania Transitoria, von Dr. L. Meyer. Virchow's Archiv, vol. viii., art. ix.

was good natured and gentle, and was liked by his companions; but immediately after the fits he was dangerous, being prone to seize upon anything which might be at hand, and to attack blindly those who were near him. the hope that a sea voyage might do him good, he went to sea, but returned after some months unimproved; he had lost the bright look of intelligence, and had the heavy, lost look so often seen in confirmed epilepsy. Such was his condition when, one evening, after drinking a little, he wandered out of the town, and saw a man lying asleep in a field. An impulse to kill the man seized upon him, so he took up a big stone which was lying near and dashed out the sleeper's brains. Having done this, he lay down by the side of his victim, and went to sleep. He was taken into custody next day, and in due course was put on his trial for murder, together with the innocent man Sweet, in whose company he had been. At the trial, where, like other poor men who have not means to pay the heavy price which justice costs, he was practically undefended, not a word was said of his epilepsy, nor of his weak intellect, nor of his history up to the events of the night of the murder; he was condemned, and with him was condemned the innocent man who had given an exact and true account of his actions, but had not been believed. On the earnest representation of the clergyman, who had elicited the facts of Bisgrove's history. he was reprieved, and, after an examination of the state of his mind had been made, was removed to the Broadmoor Criminal Lunatic Asylum. Had it not been for the happy accident of the confession, the innocent man

would have been hanged. Had it not been for the energetic interposition of the clergyman, there can be no doubt that Bisgrove would have been hanged, as other insane persons have been, although the crime itself presented all the most characteristic features of epileptic insanity.\*

The most dangerous cases with which those who take care of insane persons have to do are those of persons suffering from epileptic mania. Sometimes after one fit, more often after a succession of fits, an attack of furious and destructive mania supervenes, marked by blind and reckless violence. This is not a simple impulsive homicidal insanity, the whole mind being in a state of furious derangement, but it is of interest in relation to impulsive insanity—first, because of the blind, destructive impulses by which it is characterised, and, secondly, because of the undoubted occurrence of impulsive homicidal insanity as a masked epilepsy. These are facts of medical observation-first, that an outbreak of irresistible homicidal impulse may occur in a person who has the epileptic neurosis, without there ever having been an attack of actual epilepsy, either in the form of epileptic vertigo or epileptic convulsions; secondly, that it may immediately precede or really take the place of an attack of epilepsy in either

<sup>\*</sup> Bisgrove has recently made his escape from the asylum, and is still at large, unless, as the authorities of the asylum believe, he has committed suicide. The manner of his escape was significant. He was walking with an attendant, behind whom he got, and whom he knocked down by striking him violently on the head with a brick or stone. He then beat him on the head with the stone, leaving him insensible and apparently dead, and made his escape.

of its forms; and, thirdly, that it may follow an attack of epilepsy in either of its forms, "sudden and irresistible impulses being," as Trousseau remarks, "of usual occurrence after an attack of petit mal, and pretty frequent after a regular convulsive fit." \*

Thus much then concerning one variety of affective insanity—Impulsive Insanity, which, beginning with insane idea, manifests itself in insane and resisted or irresistible impulses to some destructive act of violence. I will now go on to discuss the second variety of affective Insanity—Moral Insanity proper, monomanic raisonnante of Esquirol.

# 2. Moral Insanity.

This is a form of mental alienation which has so much

\* It will help us to realize how near the condition of nerve-element, which we denote by the terms insane neurosis and epileptic neurosis, though not itself disease, lies to actual disease into which it may easily and quickly pass, if we pay regard to those cases in which exactly similar mental symptoms follow unquestionable disease. Morel (Traité des Mal. Ment. p. 138) relates the following case: "A man, at 55, sober and industrious, had suffered from an attack of cerebral hæmorrhage a year ago, and remained hemiplegic. His intelligence was sound; and he followed his rsual occupation. But his character was changed: he felt weary of life; he had become morose and irritable; and he complained that at times the blood rose to his head, when vertigo, noises in the ears, and flashes before the eyes occurred. These attacks became periodic. During them his heart boat violently, his eyes were injected, the face flushed, the fingers of paralysed side contracted, the arteries of neck throbbed; he was unspeakably dejected. wept, said he was lost, and became furious, throwing himself upon his wife and children, and during the very transitory delirium, instantaneous as it were, had several times attempted suicide. To have controlled the impulse in this case would have been to have controlled the movements of the heart and of the arteries. And what effort of will could have done that?

the look of vice or crime that many persons regard it as an unfounded medical invention. Much indignation therefore has been stirred up when it has been pleaded to shelter a supposed criminal from the penal consequences of his offences; and judges have repeatedly denounced it from the bench as a "a most dangerous medical doctrine," "a dangerous innovation," which in the interests of society should be reprobated. The doctrine has no doubt been sometimes used improperly to shelter an atrocious criminal, but of the actual existence of such a form of disease no one who has made a practical study of insanity entertains a doubt. To the angry declamation of the vexed judge, the sufferer from it might fairly answer in the words of Imogen:—

"I beseech you, sir,
Harm not yourself with your vexation.
I'm senseless of your wrath. A touch more rare
Subdues all griefs, all fears."

Notwithstanding prejudices to the contrary, there is a disorder of mind in which, without illusion, delusion, or hallucination, the symptoms are mainly exhibited in a perversion of those mental faculties which are usually called the active and moral powers—the feelings, affections, propensities, temper, habits, and conduct. The affective life of the individual is profoundly deranged, and his derangement shows itself in what he feels, desires, and does. He has no capacity of true moral feeling; all his impulses and desires, to which he yields without check, are egoistic; his conduct appears to be governed by immoral motives, which are cherished and obeyed without

any evident desire to resist them. There is an amazing moral insensibility. The intelligence is often acute enough, being not affected otherwise than in being tainted by the morbid feelings under the influence of which the persons think and act; indeed they often display an extraordinary ingenuity in explaining, excusing, or justifying their behaviour, exaggerating this, ignoring that, and so colouring the whole as to make themselves appear the victims of misrepresentation and persecution. mental resources seem to be greater sometimes than when they were well, and they reason most acutely, apparently because all their intellectual faculties are applied to the justification and gratification of their selfish desires. One cannot truly say, however, that the intellect is quite clear and sound in any of these cases, while in some it is manifestly weak.) A sane person who is under the influence of excited feelings is notably liable to error of judgment and conduct; and in like manner the judgment and conduct of an insane person who is under the dominion of morbid feelings are infected. Moreover, the reason has lost control over the passions and actions, so that the person can neither subdue the former nor abstain from the latter, however inconsistent they may be with the duties and obligations of his relations in life, however disastrous to himself, and however much wrong they may inflict upon those who are the nearest and should be the dearest to him. / He is incapable of following a regular pursuit in life, of recognising the ordinary rules of prudence and self-interest, of appreciating the injury to himself which his conduct is. He is as distrustful of others as he is untrustworthy himself. He cannot be brought to see the culpability of his conduct, which he persistently denies, excuses, or justifies; has no sincere wish to do better; his affective nature is profoundly deranged, and its affinities are for such evil gratifications as must lead to further degeneration, and finally render him a diseased element which must either be got rid of out of the social organization, or be sequestrated and made harmless in it. He has lost the deepest instinct of organic nature, that by which an organism assimilates that which is suited to promote its growth and well-being, and he displays in lieu thereof perverted desires, the ways of which are ways of destruction. His alienated desires betoken a real alienation of nature.

It may be said that this description is simply the description of a very wicked person, and that to accept it as a description of insanity would be to confound all distinction between vice or crime and madness. No doubt, so far as symptoms only are concerned, they are much the same whether they are the result of vice or of disease; but there is considerable difference when we go on to inquire into the person's previous history—when we pass from psychological to medical observation. The vicious act or crime is not itself proof of insanity; it must, in order to establish moral insanity, be traced from disease through a proper train of symptoms, just as the acts of a sane man are deduced from his motives; and the evidence of disease will be found in the entire history of the case. What we shall often observe is this-that after some great moral shock, or some severe physical

disturbance, in a person who has a distinct hereditary predisposition to insanity, there has been a marked change of character; he becomes "much different from the man he was" in feelings, temper, habits, and conduct. We observe, in fact, that after a sufficient and well-recognised cause of mental derangement—a combination of predisposing and exciting causes which are daily producing it—a person exhibits symptoms which are strangely inconsistent with his previous character, but which are consistent with moral insanity. Or it may appear that there has been an attack of paralysis or epilepsy, or a severe fever, and that the change of character and the symptoms of moral alienation have followed one of these physical causes. In all cases, as Dr. Prichard, who was the first to describe the disease, has remarked. there has been an alteration in the temper and habits in consequence of disease or of a sufficient cause of disease.

Perhaps the strongest evidence of the nature of moral insanity as a disease of brain is furnished by the fact that its symptoms sometimes precede for a time the symptoms of intellectual derangement in a severe case of undoubted insanity, as, for example, a case of acute mania, or of general paralysis, or of senile dementia. It is interesting, indeed, to notice that at least one of Dr. Prichard's cases, on which he founded his description of the disease, was really a case of general paralysis—a disease not specially recognized in his day, but the best known now of all the forms of mental derangement. Surely, then, when a person is subject to a sufficient

cause of insanity, exhibits thereupon a great change of character, and finally passes into acute mania or general paralysis, we cannot fairly be asked to recognize the adequate cause of the disease and the intellectual disorder as disease, and at the same time to deny the character of disease to the intermediate symptoms.

Not only may moral derangement thus go before intellectual derangement for some time and itself constitute the disease, but it constantly accompanies the latter; so much so that Esquirol declared "moral alienation," not delusion, "to be the proper characteristic of mental derangement." "There are," he says, "madmen in whom it is difficult to find any trace of hallucination, but there are none in whom the passions and moral affections are not disordered, perverted, or destroyed. I have in this particular met with no exceptions." / So true is this that disappearance of hallucination or delusion only becomes a trustworthy sign of convalescence after an attack of mental derangement when the person begins to return at the same time to his natural way of feeling. It is hardly to be expected that medical science will, in order not to vex the souls of judges, dissociate the moral from the intellectual phenomena in a downright case of madness, and regard the former, because they look like vice, as vice, the latter only as disease, or deem it right to excuse the man for his insane thinking but to punish him for his insane feeling and acts, so far at any rate as these acts are not the direct unqualified offspring of his insane thought.

/Again, moral insanity may occur in a person who has

at one time laboured under another form of madness, being, as it were, a recurrent attack under a different guise: an attack of mania or melancholia comes on and in due time passes off favourably, but on some subsequent occasion he has a genuine moral insanity, which may terminate again in mania or melancholia. There are intervals of what looks for all the world like badness, alternating with attacks of what all the world sees to be madness. In the most typical case of moral insanity which has come under my observation there had been previous attacks of melancholia, and it was upon one of these that the moral derangement directly followed. Such cases commonly end in dementia, the disease of mind passing into destruction thereof.

French writers have given the names of Folie à double forme and Folie circulaire to a well-marked form of insanity, the characteristic feature of which is excitement alternating with depression. The symptoms are chiefly those of disorder of the moral sentiments, and the two conditions of excitement and depression vary in degree and intensity in different cases. In the state of excitement the sufferer is very much like a person who is half intoxicated-loquacious, boastful, aggressive, never weary of talking of himself and of the wonderful things which he can do. And he does things which he would never have dreamed of doing in his sober sensesengages in projects of social or political reform, or launches into commercial speculations, quite foreign to his natural character and habits. His morals undergo a sad degeneration: heretofore modest, truthful, and

chaste, he is now full of self-glorification, disregardful of truth, and given to excesses; he displays a complete indifference to the feelings of those who are related to him, frequents low company, tramples upon social and domestic proprieties, and is angrily impatient of the slightest remonstrance or interference. Nevertheless he has neither delusion nor actual incoherence of thought, and is capable of giving the most plausible reasons to justify his conduct; his ingenuity in making a good tale for himself by exaggerating, denying, and perverting facts is indeed most remarkable. He exhibits as great a transformation of character as it is possible to imagine.

In this condition of exaltation he may remain for months, when, either directly or after a varying interval of a return to right reason, he passes into an opposite condition of melancholic depression. How changed now from what he was! Silent and depressed, bitterly ashamed of what he has done when he was in his exalted state, profoundly self-distrustful, he is unwilling to exert himself, and feels incapable of discharging the most simple duties. He is overwhelmed with a vague gloom, cannot face the world, perhaps takes to his bed, and may have suicidal feelings or even make suicidal attempts. Between the state of excitement and that of depression there may be no lucid break, the one passing directly into the other, or there may be an interval of sanity, of varying duration. This interval generally comes after the excitement and before the depression, but in some cases it is after the depression.

The periodical recurrence of the opposite states marks a very unfavourable form of mental disease; after it has gone on for a time the interval of lucidity becomes less marked or disappears, the regular alternating character of the phenomena is lost, and there is a steady decline of mental power.

There is yet another class of cases of moral insanity which ought to receive attention-namely, those that occur in connection with epilepsy. Nothing can be more striking than the abrupt and extreme change in moral character which is witnessed sometimes in asylum epileptics before or after an outbreak of epilepsy. Hitherto industrious, attentive, and docile, the disposition and conduct undergo a sudden change. They become negligent, lazy, indolent, forget very simple things, will not do their work, but pass their time in inaction or wander about aimlessly; their disposition too becomes evil - they are for the time liars. thieves, suspicious, discontented and irritable, and on the slightest pretexts, or without actual provocation, yield to sudden outbreaks of violence. The moral perversion is in such case so closely connected with the fits that no one can mistake its nature; but when an attack of moral insanity occurs, as it may do, instead of the usual epileptic fits—as a masked epilepsy—when such attacks recur periodically for months perhaps before the disease takes its usual convulsive form, then its nature is apt to be mistaken, and it might go hard with a person who committed an offence against law under its influence. Lastly, it should be remembered that the epileptic convulsions may cease to occur in one who has been subject to them, and that in their place attacks of moral derangement with more or less maniacal excitement may appear. Those who suffer in this way commonly find their way into prison sooner or later, and so constitute a part of the criminal population of the country.

Many cases of moral insanity will be found to be connected with more or less congenital moral defect or imbecility. In a former chapter I have pointed out that one result of descent from insane or epileptic parents is a congenital deficiency or absence of moral sense, with or without a corresponding intellectual deficiency. No one would be found nowadays to deny the existence of a congenital deficiency or absence of intellect, or to maintain that all persons, not imbecile or idiotic, have naturally equal intellectual capacities, but there are many persons who still think moral idiocy or imbecility to be a medical crotchet. A deficiency of moral sense, they would say, is a characteristic of the criminal nature, which must be met by a suitable punishment. But when we find young children, long before they can possibly know what vice or crime means, addicted to extreme vice, or committing great crimes, with an instinctive facility, and as if from an inherent proneness to criminal actions; when we ascertain that they are the victims of an insane inheritance; and when experience proves that punishment has no reformatory effect upon them-that they cannot reform—it is made evident that moral imbecility is a fact, and that punishment is not the fittest treatment of it. Many remarkable cases of precocious vice and

crime in young children have been recorded.\* Under the influence of the mental revolution which takes place at puberty, moral imbecility is apt to take the more active form of moral insanity, or of actual mania. Cases of this kind obviously bring us very near the class of

\* The following extract from a letter addressed to me gives a sad but faithful account of moral imbecility in a child about whom I was consulted:-"My first experience of Alice was when she was four and a half years old. My feeling about her then was that she was an extremely backward child, but that this might be accounted for by neglectful servants. That I do not now think to have been the case, as she had a good wet-nurse, who remained with her for a long time, and her infancy was tenderly cared for, not only by her father, but also by his mother. I had great difficulty in teaching her to read and count; certain words and numbers she would never under any circumstances repeat. It was at this time that I became impressed with the feeling that she was not as other children. Coaxing and punishment were alike unavailing. At five and a half years old she was sent to a good school, where she now is. Her mental progress has surprised me, especially in certain branches of study, but her moral nature remains entirely as before. There seems to be no appreciation of the nature of truth in her, no sorrow for naughtiness, no wish or pleasure to be good, but a great acuteness in slyly persisting in what she has been told not to do. There appear to be times in which she is indelicate in her person, dirty in her habits, nasty with individuals of the opposite sex, and as it were generally inclined to be vicious. She is rarely if ever passionate, but will quietly walk up to a brother or sister and either slap or knock them down without any provocation. In play she will follow the lead of a little brother or sister not half her age, and yet will do dirty and indelicate things with her doll which they would never think of. My aim has been never to leave her alone with the little ones, as I have found, when such has been inadvertently done, that she teaches them to do some dirty or disgusting act. I feel that though there is no imbecility or insanity in Alice, she does things which show a distressing want of moral susceptibility. She is now nine and a half years old. I have nothing further to add except that she shows a pleasurable destructiveness both of toys and clothing, and a total want of affection. She can be worked upon only through her conceit or appetite. Her maternal uncle is in an asylum on account of similar deficiencies."

criminals; in fact, when a person of the lower orders of society suffers in this way, he generally does something which causes him to be sent to prison, without question asked of the propriety of his fate.

( If the question be raised whether persons suffering from moral insanity should in every case be exempted from all responsibility for what they do wrong, I should shrink from answering it in the affirmative without qualification. They certainly have not the capacity of moral responsibility in its true sense; all the responsibility which they are capable of feeling is that which springs from a fear of punishment. But experience shows that this apprehension does influence some of them beneficially, and that the actual infliction of punishment may do them good; that in some few instances at any rate it is the best treatment which can be used. A diseased mind, like a diseased heart, may not incapacitate an individual for all actions, though it may positively incapacitate him for some; as he may do a day's quiet work with disease of the heart, although he cannot run a race, so he may be equal to some of the lesser responsibilities of life when he is not quite sane, and not capable of bearing the strain of great obligations. In other instances there can be no question that the persons are not proper objects of punishment in any form; and perhaps in any case the truest justice would be the admission of a modified responsibility, the degree thereof, where it existed, being determined by the particular circumstances of each case.

Assuredly moral insanity is disorder of mind pro-

duced by disorder of brain. In examining the conditions of its occurrence we have seen how plainly it follows the recognized causes of insanity; how it may precede for a time the outbreaks of various forms of unequivocal general alienation; how it accompanies intellectual insanity in most of its varieties; how it may follow other forms of general insanity; how it may precede or follow epilepsy, or occur as a masked epilepsy; how it may supervene at puberty on congenital moral imbecility; and how it may finally pass into dementia. These are facts of observation. Taking them fairly into consideration, and giving them the weight which they deserve, can we doubt that moral insanity is a form of derangement as genuine as any other form of mental derangement? If the law cannot adjust the measure of punishment to the actual degree of responsibility, and in its regard to the welfare of society cares not greatly to trouble itself about the individual, that is no reason why we should shut our eyes to facts; it is still our duty to place them on record, in the confident assurance that the time will come when men will be able to deal more wisely with them.

#### NOTE.

The following extracts from the letters of a young lady who was in a deeply melancholic state furnish a vivid picture of the way in which a suicidal idea may fasten upon the mind, of the mental anguish which it may occasion, and of the strange inconsistency, not uncommon in mental derangement, of a strong inclination to suicide accompanying the belief that death will be immediately followed by the everlasting torments of hell:—"I want you to know how much more the state of my soul has to do with the thought of suicide and with the agony in which I live than you would have any idea of from our short interview of vesterday.

NOTE. 183

I left school at eighteen, and I am now thirty-one years of age. I cannot remember ever having the thought of destroying myself or any one else before leaving school, but I do remember now that many years ago I was every now and then distressed with the idea. I heard a long while ago that two of my great uncles had destroyed themselves, and that made me fear that I had inherited insanity. But now with regard to the exercises of my soul. You, I suppose, regard my brain as the eause of all I suffer; I cannot for one moment believe that. It is something that eannot be reached by any remedies, I am surc. Every day and all the day I have before mc my past life with all its privileges, mereies and sins-my whole character clearly before me in every point—the maddest remorse at knowing that up to this moment I have lived without God in the world, although outwardly so exemplary in many respects. I have such thoughts of time and eternity, heaven and hell, the soul and the body, and the relative importance of things material and spiritual as I believe no one has who is not on the verge of eternity. I have the inexpressible agony of knowing that my life is over so far as any possibility of salvation is concerned. Can you-no, you cannot-picture to yourself the anguish of one who has loving parents, brothers and sisters, all Christians going to heaven, a beautiful home, everything external to give nothing but happiness, yet so intensely realizing that there is nothing but Hell before her, that she does not know how to endure existence from day to day. You talk of my ease as bad but not hope-I know that it is hopeless. I know that the worm that dieth not, that the fire that is not quenched, is raging within me. memories consume me every day, and I ask you what rest there can be for the brain when the soul is in such a hopeless state." In another letter, written about six weeks afterwards in the same strain, she says: -"I eannot and do not believe (Oh! how I wish I could) that there is now sufficient cause in my body for my anguished state of heart and soul: it seems utterly impossible to me. Then another thing strikes me very foreibly. I was not getting gradually more susceptible when I heard of a murder or suicide. I had had no sudden shock; indeed I had felt worse several years before. And yet without the slightest warning the thought came, was intermittent for three or four weeks, and then on my return home in July the thought was completely fastened upon mc, so that I could not forget it one minute when awake—wherever I was, or whatever I was doing, positively I could not, although I longed to do so-for I had no desire, no motive, to commit suicide. How could I possibly have! But very soon I became religiously depressed, and about the middle of August I felt sure that I was lost for ever without the possibility of pardon. . . . Now I want you to see this very plainly

that whereas at first I had every minute the thought of suicide without any motive to commit it, now and for a long time past the very hell in which my lost soul lives makes me so desperate that I feel as though I could not continue in the body-no motive at first, though certainty of hell for ever now driving me to it. . . . What life has been, and what it should have been in every respect, I see now with the agony of one who knows that the probation is over, and that there is nothing but death and hell before him. Only with me I have not the privilege of being diseased in body, and thus stricken to death. I have got to put an end to myself through very agony of heart and soul-an unforgiven, lost soul. Now, can you truly say that weak nerves produce all this? Oh! it is not so. I am quite sure that I shall never again return to my home and family. Such bliss will never be for me. God will not thus rescue me from the very jaws of hell, for there it is, I assure you, that And one day you and my friends will know that I was a terribly true prophetess." There are indications of mental improvement in some of the expressions in that letter, which were confirmed by the next, received a fortnight afterwards :- "I wished to be the first to have the pleasure of telling you of my decided improvement, but Mrs. --- has forestalled me. I was afraid of acknowledging it at first, lest the fancied change should prove a delusion. Mercifully it was not so. Oh! how different I am from what I was even a week ago. . . . Still my thoughts run so much in one groove. The idea of suicide constantly there, without however the wish to commit it. Do you think the time will ever come when for a whole day I shall never even think of it? I cannot yet imagine such freedom. I feel like one turned back from the brink of the grave to life and home and friends again—verily, I have been in a chamber of horrors! How glad I shall be to think less of myself!" After a little time more, she recovered entirely.

## CHAPTER VI.

#### PARTIAL INSANITY.

## II.—Partial Intellectual (or Ideational) Insanity.

Simple melancholic depression preceding intellectual derangement: homicidal or suicidal outbreak: case of Charles Lamb's sister-Melancholia with hypochondriacal hallucinations and delusions; homicide-Delusions of suspicion or persecution, and homicidal mania: case of Dr. Pownall-Concealment of their delusions by insane persons-Bodily symptoms preceding an outbreak of homicidal mania: the characters of the attack—Dangerous character of the insanity that is accompanied by delusions of persecution-An insane person does murder out of revenge: is he a responsible agent?—Futility of argument against a delusion: a limited delusion indicates deeper mental derangement: examples-Premeditation in planning and ingenuity in perpetrating homicide entirely consistent with insanity: example—Danger of recurrence of homicidal mania: examples-Conduct of insane persons after a homicidal act -Homicidal insanity in which, first, the act is the direct offspring of the delusion; and, secondly, in which it cannot be traced to its influence - Hoffbauer's metaphysical criterion of responsibility-The medical doctrine that partial insanity excludes the idea of criminality, whether or not the acts are the results of delusion: the reasons on which it is based-Discussion of the legal and medical views with regard to the working of an insane delusion in the mind: examples showing the impossibility of tracing its workings -Pathological meaning of the existence of an insane delusion, however limited—The right problem in homicidal insanity is to trace a connection, not between the dclusion and the act, but between the disease and the act.

While admitting the existence of simple impulsive insanity, it must be acknowledged that most often symptoms of derangement in addition to the morbid impulse, either antecedent to or concomitant with it, will be discovered, if a careful enough examination be made—such symptoms as previous marked melancholic depression, morbid suspicion, or actual delusions. It will be found that many of the suicides and homicides done by insane persons are done by persons labouring under commencing melancholia, before the disease has developed into the stage of intellectual derangement; though overwhelmed with a vague fear or distress, dejected, sleepless, and feeling themselves overladen with the heavy burden of their miserable lives, they manifest no actual delusion, and are not thought by their friends or medical attendants ill enough to be placed under control.

Of this kind apparently was the homicidal insanity of Charles Lamb's sister, Mary Lamb. Worn down to a state of great nervous depression by attention to needlework during the day and to her mother by night, she "had been moody and ill for a few days previously," says her brother's biographer, and the illness came to a crisis on the 23rd September. On that day, just before dinner, she seized a caseknife which was lying on the table, pursued a little girl (her apprentice) round the room, hurled about the dinner forks, and finally, in a fit of uncontrollable frenzy, stabbed her mother to the heart. Her brother was at hand only in time to snatch the knife from her before further hurt could be done. He found his mother dead, and his father, who was in his dotage, bleeding from a wound on the forehead which he had received from one of the forks. She was sent to an asylum, where she recovered her reason in a short time. returning thence to live with her brother. Recurrent attacks of insanity afflicted her for the rest of her life, but when the indications of an attack presented themselves, she placed herself or was placed under care in an asylum.

Homicidal or suicidal insanity supervening on melancholic depression, with or without delusion, may be accepted as the usual order of its occurrence. A mother, worn down by anxiety and ill-health, becomes very lowspirited and desponding, imagines perhaps that her soul is lost, or that her family are coming to poverty, and one day, in a paroxysm of despair, kills her children in order to save them from misery on earth, or because she is so miserable that she knows not what she does. Under the influence of a like depression and like delusions a husband kills his wife. The symptoms exhibited by him before the act may be limited to great mental dejection of a hypochondriacal character, moodiness and loss of interest in all things, and perhaps a morbid feeling of despair concerning the state of his health or the state of his affairs; his friends observe nothing more in him than that he is "very low," and, if they belong to the lower class, will probably describe him as "studying too much," by which they mean brooding too much. Suddenly on some occasion his mental suffering rises to such a pitch of anguish or agony that he falls into a paroxysm of frenzy, during which he loses all self-control, and does violence to himself or some one else, not knowing at the time what he is doing, and being horror-stricken afterwards when he realizes what he has done. By the homicidal deed, which has been truly described as a raptus melancholicus, he

is freed from his terrible and overwhelming emotion, returns perhaps to himself, and may display no present symptom of insanity. In such a case the delusion has no evident bearing upon the act, although both delusion and act are the manifest offspring of the insanity; the passing frenzy is a pure convulsion of mind springing from that diseased state of the nerve-centres of mind, of which the depression and delusion are also expressions. In other cases, however, it will be found, on inquiry, that there has been a suddenly arising hallucination or delusion which has accompanied the act; a loud roaring sound in the ears, or a redness as of fire or of blood before the eyes, or a sulphurous smell in the nostrils, testifying to the disorder which has seized upon the sensory nerve-centres.

One example will serve as an illustration of a class of cases. At the Derby Assizes, on December 16th, 1871, Samuel Wallis, a shoemaker, was indicted for the wilful murder of his wife, with whom he had always lived on the most affectionate terms. He had stabbed her in the neck in the night with a shoemaker's knife which he kept in the room for the purposes of his work, and had then walked away. When apprehended, he was excited and said—"I was up in the fields, and then I went down into the colliery. I came out again about dark. There was such a fearful thundering noise in the pit, I was so glad to get Brampton looked so black and dark, and trains were running up and down as fast as they could." The pit had not been worked for a long time, so that there could have been no noise, nor were there any trains running at Brampton. At the trial, a surgeon, who had attended the prisoner for some time, gave evidence that he had suffered from derangement of the stomach and liver and dejection of spirits, and that he was under the delusion that he would never recover. He had been sent away for change of air, but had only stayed one day, and he was to have gone away again on the very day of the murder. The witness gave it as his opinion that it was a case of homicidal mania, basing this opinion on the complete absence of motive, the nature of the act, the previous symptoms of mental disorder, and the subsequent conduct. The surgeon of the gaol gave a similar opinion. and said that the prisoner had stated to him that the act was so impulsive he did not know what he was doing, and was horror-stricken when he discovered what he had done. The judge, in summing up, pointed out that there was no evidence of insanity at any other time, that he had no delusions, nor had his conduct been eccentric. Still there was a complete absence of motive for the crime, and if they felt satisfied that he was in a state of frenzy at the time, and unconscious of the nature of the act he was doing, they must find him "Not guilty." "It might become a dangerous thing to permit this kind of defence to prevail; nevertheless, if they were perfectly satisfied it was so, they must say so." The jury found him guilty, but recommended him to mercy on account of previous weakness of mind! He was sentenced to death, but the sentence was not carried into effect. Had he been tried by some judges, it is certain that he would have been executed, as other similarly insane persons guilty of homicide have from time to time been. Had there been

any ground for alleging ill-feeling against his wife, it is almost certain that, notwithstanding the testimony as to his insanity, he would have been executed. Had judge and jury really known anything of the nature of insanity, he certainly would not have been found guilty, but would have been acquitted at the trial on the ground of insanity.

On examination of the recorded instances of homicidal insanity, it will be found that in many of them there have been delusions of suspicion or persecution accompanying the melancholic depression. The individual has believed himself to be continually insulted, reviled, followed, robbed, poisoned, or ruined in health and property, and has done homicide under the influence of such insane delusion. The following case is an instructive example:— Dr. Pownall, a medical practitioner, was admitted into the private asylum of Northwoods, under the care of Dr. Dayev, on April 2nd, 1859. He was described in the medical certificates, which were dated on the same day, as "having made a murderous attack on his mother-in-law, whom he usually respected and loved;" "for the last three months he had become an altered man," had been "low and desponding," and "he had made an attempt to destroy himself," This was the third attack of alienation, the first having occurred when he was twentytwo years of age, the second after an interval of fourteen years, and the third after another interval of four years and a half. Between the attacks lie had conducted successfully a large medical practice, and had been so much respected by his fellowtownsmen as to have been chosen mayor of the town. He

was described as being naturally an amiable and estimable man, but when insane, as violent and dangerous to himself and others. The first indications of mental derangement were a mistrust of his nearest relatives and a suspicion of design on their part against his interests; these symptoms being followed, after a time, by delusions that poison was mixed with his food and that he was otherwise injured, and by suicidal and homicidal violence. During his second attack of derangement, in 1854, he had shot a gentleman with whom he was out shooting; and although the coroner's inquest resulted in a verdict that the fatal injury was accidental, there were some who thought differently.

On his arrival at Northwoods, Dr. Davey, who had an interview with him, found him a little agitated, but nothing more. He conversed in a calm and gentlemanly manner, and as the conversation was continued, wept and expressed the deepest sorrow for his violence to his motherin-law; when asked to give up anything about him with which he might injure himself or others, he at once gave Dr. Davey two penknives. Thenceforward his behaviour and conversation were quiet and rational; he joined Dr. Davey's family and children in their walks, and rode out with him and his son. He remained in the asylum for four months, and during the whole of that time betrayed no symptoms of mental disease, so that he was considered to be quite well, and was discharged as recovered on the 10th August. Regard being had to his antecedents, however, he was sent to the house of a medical man and was accompanied by an attendant. Twenty days after leaving Northwoods, on the 30th August, he killed a female servant by cutting her throat with a razor, having shown no indication of insanity up to within a few hours of the act. Acquitted at his trial on the ground of insanity, he was sent to Bethlehem Hospital as a criminal lunatic, where he was under the care of the late Dr. Hood, who, speaking of his case after an observation of several months, said that "from that time up to the present, although he had watched him with no ordinary care, he did not know that he could attach any particular symptom of insanity to him," and that "supposing he was a private patient in my asylum, and the Commissioners in Lunacy asked me why I detained him, I do not know that I could give any definite reason for it."

By the unhappy event in this case it was rendered plain that Dr. Pownall belonged to one of two classes of patients: either he was subject to periodical attacks of recurrent mania, or, as is more probable, he was able successfully to conceal his delusions when he had a strong motive to do so, and was living under conditions favourable to the maintenance of tranquillity of mind. ever be the true explanation, one thing is certain—that a man may present all the appearances of sanity, so as, if insane, to deceive the most skilled observers, unto the time of a fatal outbreak of homicidal mania. Of the fact that insane persons are capable of concealing for a long time in a complete manner their delusions of suspicion and persecution there can be no doubt; and this successful concealment of them, where they are known to exist, renders it not improbable that they have been present,

undetected, in some cases of what has been supposed to be impulsive homicidal insanity. But if a person may thus skilfully simulate sanity, when he feels it to be his interest to do so, it might naturally be argued that he exhibits sufficient clearness of consciousness and sufficient strength of will to make him justly responsible for an act which he knows to be a crime, and which he proves by his conduct he is not without will to resist. Granting that Dr. Pownall acted, as no doubt he did, under a delusion that the servant whom he killed had injured him in some way, and that the murder was the effect of the delusion, it might still be contended that he was responsible for what he did; for supposing the imagined injury to have been real—supposing, in fact, his belief not to have been a delusion, a man so sane in other regards must have known that to take her life was a crime punishable by death. Knowing this, had he the power to resist the impulse to kill her? This was really the vital question in the case, as it is in other cases of homicidal insanity.

We shall not be in a position to form a right judgment concerning any case of this kind unless we distinctly realize the possibility of an impulse to violence in an unsound mind becoming at times perfectly uncontrollable. That must be admitted as a general proposition, the question whether the impulse was uncontrollable in a given case being determined in accordance with the particular facts. There are sometimes striking coincidences between the exacerbations of the mania and disturbances of the bodily health. Before an outbreak of homicidal impulse it may be found that there has

been a change in the patient's symptoms, physical and mental: his tongue is white, he is feverish, feels faint and ill. loses his spirits, is suspicious, anxious and disquieted; these are symptoms which in such a case are sometimes forerunners of the attack. When this breaks out, the mind is overwhelmed with such a vast and painful emotion, such an unspeakable feeling of anxiety and distress, that the deed of violence is, as it were, an explosion of it, an uncontrollable convulsion of energy giving utterance to an indescribable morbid feeling; knowing not what he is doing, he kills some one, friend or fancied enemy, or perhaps an entire stranger, not really from passion or revenge or enmity of any kind, but as a discharge which he must have of the terrible emotion with which he is possessed. emotion corresponds in the higher centres of thought with the hallucination in the sensory centres, and the act which discharges it is as involuntary as the cry of agony or the spasmodic muscular tension produced by intense physical pain. Hence there are four things noticeable in homicidal mania: first, the paroxysmal nature of the actual violence, which takes place only when the emotion becomes unendurable, the idea or impulse, though present, being almost passive in the intervals; secondly, the mighty relief which the patient feels directly he has done the deed, so that he is delivered from the extraordinary disquietude which he had previously felt and may give a rational account of himself; thirdly, the frequency with which the attack is made upon a near relative or upon any one, friend or stranger, who happens to be at hand

when the paroxysm occurs; and, fourthly, the indifference which he displays afterwards to the dreadful nature of what he has done, which, having been done when he was alienated from himself, was not more truly his act than convulsion is an act of will. It is hard to dive into the depths of a diseased mind, and quite impossible for a sane mind to realize what passes there, but so far as a description can be given, from a psychological point of view, of the state of mind of the homicidal madman, the records of experience indicate that it is what I have endeavoured to picture. Assuredly it is unjust to him to assert that he can always control an act which he knows theoretically to be wrong. The fear of death has no influence whatever to strengthen the power of control during the paroxysm of painful emotion which overwhelms reflection; a greater fear, the fear of hell and all its horrors, is of no avail in a mind deeply imbued with religious feeling to prevent suicide under similar circum-The sufferer is the victim of disease and a proper subject for medical treatment, not a crimina and a proper subject for legal punishment.

It sometimes happens in the case of a person labouring under delusions of persecution that an act of violence against others, which is attributed perhaps to the excitement of intoxication, is the first circumstance to betray the unsound mental state. The delusion may be concealed for a long time, notwithstanding persistent efforts to elicit it, when he suspects any danger to himself from the avowal of it. One of my patients, who had for some time had delusions that people in the

streets, in hotels, and elsewhere were speaking ill of him, accusing him of vices of which he was innocent and otherwise persecuting him, was sent to an asylum on account of an outbreak of excitement in the middle of the night, during which he smashed the windows of the house and made a savage attack upon his mother. Before this scene he had been extremely cautious about giving utterance to his delusions, but when he found into what trouble they had brought him, it was impossible to elicit an avowal of them. Accordingly, after being some time in the asylum, he was discharged. Two years afterwards he consulted me about the persecution and torture to which he believed he was subjected night and day by being played on by electricity and mesmeric tricks, his whole muscular system being kept in a constant succession of jerks thereby; and on that occasion he confessed to me with some glee that he concealed and denied his delusions in the asylum, though he had them all the while, because he found he would not be released by the authorities if he confessed them.

In these cases it is often most difficult to advise; for, on the one hand, a person, though labouring under delusions of the kind, may go on for years in the world without compromising himself by any act of violence, wherefore it seems a harsh and unnecessary measure to place him under restraint; on the other hand, he may break out into dangerous violence at any moment. More or less dangerous therefore at all times, patients of this class are most dangerous when the delusions of persecution are accompanied by a hypochondriacal gloom

and depression, with abnormal sensations in the stomach, liver or other organ, and especially when, as sometimes happens, they imagine they hear a singular voice in the chest or stomach; believing that their bodily sufferings are caused by the persecutions to which they are subjected, or obeying the imaginary voices which they hear, they are apt to revenge themselves on those whom they believe to be the causes of what they undergo. Oftentimes they first appeal in vain to the police or to persons higher in authority, whereupon they conclude that these are implicated in the conspiracy against them, or at any rate bribed to do nothing in the matter, and finding that they can nowhere get redress, they are driven to desperation, and fall back upon the inherent and inalienable right of man to protect his life at any cost. Or they do an insane act of violence in order to compel attention to their extraordinary case and to have the opportunity of declaring publicly in a court of justice what they have suffered, when the truth shall be made known and their persecutors confounded.

When an insane person kills some one whom he believes to have injured him in health, property, or reputation, and when the act is done therefore out of revenge, what are we to say of his responsibility? The English law, as we have seen, declares him to be liable to the punishment which would be inflicted if he were not insane; the disease is considered to make no difference in his culpability; the act is deemed to be his act notwithstanding his alienation. Moreover, the popular notion that a really insane person acts without motive, or at any

rate not from the same motives which influence a sane person, strengthens the erroneous belief that when he acts out of revenge he is not truly insane or is not acting insanely. But a person does not, when he becomes insane, take leave of his human passions nor cease to be affected by ordinary motives, and when he acts from one of these motives he does not, by doing so, take leave of his insanity; if he kills some one out of revenge for an imagined injury he is still a madman taking his revenge. Nothing is more certain than that the inmates of lunatic asylums perpetrate violence of all kinds and degrees under the influence of the ordinary bad passions of human nature. The question then is, whether it is just to hold a madman who acts from revenge equally responsible with a sane person who does a similar act in a similar spirit.

To answer in the affirmative unhesitatingly seems verily a bold if not a reckless thing when it is remembered that insanity is the effect and evidence of loss of power of will produced by disease, and that the final result of its increase is a complete abolition of will. The truth is, that what in the sane mind is controllable passion becomes in the insane mind uncontrollable insanity. The madman has an insane delusion that his neighbour is continually persecuting him in some absurdly impossible way; he knows at the same time that it is against the law of God and man to do murder, and he withstands for a long time the impulse of passion which instigates such vengeance; perhaps he denounces his persecutors to the authorities and appeals for redress; but

at last, either from further deterioration of health causing a greater activity of the delusion and less power of will, or from the great provocation of the occasion, he is driven to desperation, passion drowns reflection, sweeps away the trifling resistance of an enfeebled will, and hurries him into the deed of angry vengeance. To say of such an one that he has no power of control, or to say of him that he has the same power of control as a sane person, would be equally untrue. To be strictly just, we must admit some measure of responsibility in some cases, though not the full measure of a sane responsibility in any case; at the most, we must admit an insane responsibility, such as is recognized in the management of asylums, where the insane are worked upon by ordinary motives, but are not punished as fully responsible agents when these motives fail to hold them in check and they break out into violence. It is of course impossible to measure with anything like exactness the intensity of a morbid impulse and the degree of resistance which the will may be capable of opposing to it; some may have yielded to temptation, though convinced that they ought to have resisted it, and are therefore so far culpable; but the disease with which they are afflicted is already so great a calamity that the infliction of the extreme punishment of death would certainly seem "an inhumanity towards the defects of human nature." No power of will can hold in check the progress of disease, and it is truly a piece of strange irony to exact such a controlling power in a disease the special character of which is to weaken the power of will and to increase the

force of passion—to lessen the power of controlling what is more difficult of control. It will be enough to secure the community against the repetition of the offence by enforcing confinement for life.

Let it be considered furthermore that an insane person's revenge for a fancied injury is truly a passion which springs from his disease; that it is the direct, and the act which it instigates the indirect, offspring of the delusion; and that what is demanded of him is that he should control a passion which is generated by morbid beliefs over which he has no control. It is impossible so to divide the personality into two distinct parts, one of which is in subjection to a morbid idea and irresponsible, while the other remains master of itself and responsible. The theory of such a division is most extraordinary when applied to the will and moral liberty -to that which constitutes in the highest degree the unity of the human personality. Let any one who thinks otherwise converse freely with an insane person who has delusions of persecution—that he is watched, insulted in the streets, maliciously pursued and denounced wherever he goes, and who, apart from these delusions, appears to be as rational as other men are; let him reason exhaustively with him and try to convince him of the error of his foolish belief: let him demand what evidence he has to warrant it, listen to it seriously, and then demonstrate how inconclusive and inconsistent it is; let him set forth to him how absurd it is to suppose that any person should for no known reason pursue him as he imagines he is pursued, and how little they can have to gain by it; let him point out further that no one else can discover the least evidence of what he believes, but that every one else considers it utterly impossible; let him exhaust, as he may in vain, all the resources of argument in his endeavour to shake the delusion;—he will part from him a wiser and a sadder man in his knowledge of the extent of mental derangement which is betrayed by a limited delusion.

Not long ago I tried all this with a most intelligent and highly cultivated gentleman who believed that there was a conspiracy against him, and that wherever he went in his travels through all parts of Europe he was followed and watched by the secret agents of his enemies. He acknowledged the justice of my arguments, admitted that all that he had observed and misinterpreted in the demeanour of those whom he suspected was consistent with two theories—the theory of their innocence as well as that of their guilt, and confessed that while the former was reasonable and probable, the latter was most unreasonable and in the highest degree improbable; owned that he himself felt at times that he must be mad, and should probably consider any one else who believed as he did to be so; -and, I need hardly say, went his way without bating one jot of confidence in his delusions. Baillarger tells a story which teaches the same lesson in a striking way. When M. Trélat was intrusted provisionally with the management of the Bicêtre, he had under his charge a patient who believed that he had solved the problem of perpetual motion. After having in vain employed all the arguments which he could make use of to shake the

delusion, the idea occurred to him that perhaps the great authority of Arago would have the most beneficial effect in convincing his patient. Arago, after having received the assurance that insanity was not a contagious malady, agreed to combat the delusion. The patient was taken to his study, where A. von Humboldt happened to be. When the poor madman heard from M. Arago the firm and convincing disproof of his error, he was as it were stupefied, shed abundant tears, and deplored the loss of his illusion. The end which they had in view seemed to be attained, but M. Trélat and his patient had hardly gone twenty paces from the house when the latter turned to him and said-"It is all one; M. Arago deceives himself; I am in the right." The delusion of eternal damnation is not uncommon in the melancholic form of insanity, and the friends of an insane person labouring under this terrible delusion will sometimes vainly try what the authority and arguments of a clergyman will do to dissipate it—in one case of a patient under my care a distinguished bishop's aid was invoked in vain -no reasoning will touch its foundations-

You may as well Forbid the sea for to obey the moon, As or by oath remove or counsel shake The fabric of his folly.

The very fact that an insane delusion does persist in the mind is proof enough that the man cannot reason soundly; he will reason insanely, feel insanely, and sooner or later act insanely. Its foundations are not laid in reason, but in disease; and it holds its ground in

the mind just as a cancer or other morbid growth holds its ground in the body,-by drawing to its own use and converting to its own nature the nutriment which should support healthy activity, and so render its existence impossible. A cancer is physiologically illogical; nevertheless it persists, and finally kills the patient, being pathologically logical. In like manner an insane delusion, though psychologically unaccountable, has its foundation in the inexorable logic of pathology, and persists by perverting to its own use and maintenance the reasoning which should render its existence impossible. case of the delusion, as in the case of the cancer, we are concerned to observe the pathological phenomena, and to find out their laws; physiology will not help us much in the one case, nor psychology in the other; our investigations must follow the paths of inductive inquiry. To hold an insane person responsible for what he feels and does in consequence of his insanity, would be no less unjust than to hold him responsible for entertaining his delusions, in spite of the plainest evidence to contradict them.

Before taking leave of these cases of homicidal insanity in which there have been delusions of suspicion and persecution, let it be noted that there may sometimes be the clearest evidence of premeditation in the plan and of ingenuity in the execution of the deed. It is entirely consistent with insanity that the individual, knowing in the abstract the difference between right and wrong—nay more, knowing that he is doing wrong in the particular instance—should contrive the means of murder, do it

deliberately, and endeavour to escape the consequences afterwards. This is a statement which is not easy of acceptation by those who, measuring the workings of an unsound by the standard of a sound mind, conclude that he who shows so much reason and self-control in his manner of doing an ill deed, might use that reason and self-control to forbear doing it; nevertheless, it is a generalization from experience, which no one who has a practical knowledge of insane persons will contest, and which no one who has studied scientifically the pathology of mind will find unphilosophical. A striking instance of the cool and daring cunning of insanity, and of the sense of responsibility that may accompany it, is related by the American writers Wharton and Stillé-writers who are far from exhibiting an undue indulgence in estimating the responsibility of the insane:-

"A man named John Billman, who had been sent to the Eastern Penitentiary of Pennsylvania for horse-stealing, murdered his keeper under circumstances of great brutality, and yet with so much ingenuity as to elude suspicions of his intentions and almost conceal his flight. He hung a noose on the outside of the small window which is placed in the door of the cells to enable persons outside to look in; he then induced the keeper, in order to look at something on the floor directly at the foot of his door, to put his head entirely through; the noose was then drawn, and but for an accident the man would have been strangled. Notwithstanding this attempt, the same keeper was inveigled into the cell alone a few days afterwards, on the pretence of Billman being sick, and was there

killed by a blow on the head with a piece of washboard. Billman undressed him, changed clothes with him, placed him on the bed in such a position as to induce the general appearance of his being there himself, traversed in his assumed garb the corridor with an unconcerned air. addressed an apparently careless question to the gatekeeper, and sauntered listlessly down the street on which the gate opened. He was, however, soon caught; but his insanity was so indisputable that the prosecuting authorities, after having instituted a careful and skilful medical examination, became convinced of his irresponsibility, and united upon the trial in asking a verdict of acquittal on the ground of insanity. He was then remanded for confinement under the Pennsylvania practice; and some time afterwards, when in a communicative mood, disclosed the fact of his having several years back murdered his father under circumstances which he detailed with great minuteness and zest. Inquiries were instituted, and it was found that he had told the truth. The father had been found strangled in his bed, the son had been arrested for the crime, but so artfully had he contrived the homicide. that he had been acquitted by means of an alibi got up by means of a rapid ride at midnight and a feigned sleep in a chamber, into which he had clambered by a window. Here was not only a sense of guilt, but a keen appreciation of the consequences of exposure, and an abundance of evidence of long-harboured intention and intelligent design."

Another lesson which may be drawn from this case is one which sad experience of homicidal mania has often

taught-namely, the exceeding danger of a recurrence of the attack. One can hardly ever say of a person who has once laboured under it that he has recovered entirely. so sudden, unexpected, convulsive may be the outbreak of a paroxysm. Pinel mentions the case of an inmate of the Bicêtre, who, sixteen years after he had strangled his children, assassinated two of his fellow-patients. And Esquirol relates the case of an advocate, of a gloomy and taciturn character, who was placed under his care on account of an attack of insanity in which he had attempted to throw himself out of the window. During his illness he accused his wife of infidelity, believed himself damned, made attempts at suicide, and for a time refused food from fear of poison in it. After three months he seemed to be convalescent, and was removed by his wife. On their way home, though very affectionate to her and conversing reasonably, he had an angry altercation with a passenger who sat opposite to his wife, and of whom he was jealous. On the day after his arrival home he took by the hair, as if to play with him, a boy of twelve years of age, his wife's brother, led him towards his desk, and then let him go, saying, "It is not worth while." On the third day he went into the cellar, accompanied by his wife, under the pretext of seeing whether all was right there. A few minutes afterwards his sister-in-law, aged twenty years, followed. As no one returned, a servant went down to see what was the matter; she found the two women dead, bathed in blood, while he was crouched in a corner behind some barrels, a razor lying some distance from him. He was sent to Charenton.

At one time he said that the cellar was lightened in a brilliant manner, and that the two ladies were devils who had come to seize upon him; at another time he declared that he did not know what he was doing. It was very doubtful, however, whether hallucination had anything to do with the murder, for he had evidently thought of killing the boy two days before, and he must have taken the razor into the cellar with a homicidal design. After being some time in the asylum he seemed to have recovered, although he showed a remarkable insensibility to the remembrance of what he had done. He wrote numerous letters to the authorities, declaring that he had been mad, that he was cured, and that he ought to be put in charge of his property and children. After having made these demands for several years, he was examined by Marc, who could not discover any intellectual disorder:-"I remained," he said, "at least an hour and a half alone with him, and during the long conversation which we had together, I was not able to detect the slightest trace of mental disorder; but I was struck with his indifference when I spoke with him of the double homicide which he had committed." Notwithstanding that Marc declared that it would be imprudent to grant him his liberty, his importunities ultimately obtained it. He established himself with a woman in Paris, where he opened an office. Two years after his discharge, and ten years after the invasion of his disease, he was seized with a new attack of fury, and but for the vigorous resistance of the woman with whom he lived, he would have thrown her out of the window. He was

sent to an asylum, where he died after some days of fearful delirium, in which he wished to kill himself and every one else.

There is nothing uniform, immediately afterwards, in the conduct of patients of this class who have done or attempted to do homicide. In some the memory is obscure and confused, they scarcely understand what has happened, and they make no attempt to escape; others realize vividly what they have done as soon as the overwhelming emotion has been discharged in the act, and, obeying the reviving instinct of self-preservation, do at first attempt to escape, though they probably surrender themselves to justice in a little while. Some manifest a complete moral insensibility, seem perfectly indifferent to what they have done, and utterly unable to realize its criminal nature; while others, when they come to themselves after the deed, display the keenest anguish and remorse. Attempts at suicide both before and after the homicide are not at all uncommon.

I proceed now to consider another class of cases of homicidal insanity—those in which there is a definite delusion in the mind, and the crime is the direct or indirect result of the delusion. When a father believes that he has received a command from Heaven to slay his son, and obeys it, there can be no manner of doubt of his insanity, and no one would impute the deed to him as a crime: it was the direct unqualified offspring of the delusion. Even lawyers admit readily that this kind of insanity excludes all responsibility for actions which can be shown to be in close relation to the particular delusion

under which the so-called monomaniac labours: the vital question for them being how far the delusion has affected the mind of the agent at the time. No human punishment, it is supposed, would restrain him from doing what, though legally criminal, he believes it right to do; his knowledge of right and wrong in this regard is destroyed by disease. But if the delusion cannot be shown to have influenced the act-if a man has the maddest desion which madness can imagine, and does a murder which cannot be traced to its influence—then it is declared that he ought not to be absolved from culpability; that he ought justly to be held responsible in all other instances. Hoffbauer proposed that, in order to answer the question of responsibility in regard to the acts of insane persons, "the dominant impression in which their delusion consists should be regarded not as an error, but as truth; in other words, their actions ought to be considered as if they had been committed under the circumstances under which the individual believed himself to act." If the imaginary circumstances make no change as to the imputability of the crime, then they ought to have no effect on the case under consideration; if they lessen or destroy culpability, they ought to have that effect in the supposed instance. The man is to be assumed to have a dual being—a sane and an insane personality; and according as he acts in the former or in the latter capacity is to be condemned as a criminal or to be acquitted as a madman. Such is the criterion of responsibility which is founded on the metaphysics of insanity, and which commends itself to the approval of those who, like the

eminent philosopher Kant, hold that the determination of the question in any case should be left to philosophers who have made the human mind their study, and not to physicians who have acquired a knowledge of the disease. It is fortunate in this matter, as in other matters, that physicians have devoted themselves to the patient observation of facts, instead of invoking their own minds to utter oracles to them, or accepting with reverence the confused oracles which other minds might utter to them. They would have known little of the nature of any disease or of the remedial action of any drugs at this day had they depended only upon what those who had studied the physiology of the body could tell them; and they would have known little of the nature of mental diseases and of their proper mode of treatment if they had depended only upon what those who had studied psychology could tell them.

I have already pointed out that lawyers, in the importance which they assign to delusion as a mark of insanity, vastly overrate its value. Not half the insane acts of a person labouring under general mania are really the offspring of his delusions; they represent the overflow of morbid energy, are often aimless and motiveless, so far as we can judge—the mere convulsive expressions of disordered nerve-centres. Even the acts which are the offspring of delusion are not such as are the logical outcome of it, or such as are adapted to the attainment of the delusive aim; they are the results of insane reasonings from insane premises, or of impulses which spring up in insane

minds without being connected with the existing delusions.

Let me suppose a case in order the better to apprehend the doctrine which is legally propounded and the criticism to which it is open. An individual believes himself to be Jesus Christ, but talks rationally on all matters unconnected with his delusions, and conducts his affairs with intelligence; nevertheless he one day suddenly shoots somebody, and in due course is put on his trial for murder. It cannot be shown that he did the deed under the influence of his delusion; moreover, if the imaginary circumstances were real, they would hardly absolve him from responsibility, seeing that it is not in accordance with the character of Jesus Christ to do murder, and seeing that a madman must theoretically be consistent with his character; he must therefore righteously be put to death as a criminal. Clearly the theoretical principle ill bears the test of practical application, for it is certain that, notwithstanding its foundations in metaphysical philosophy, in no civilized country in the world would such a person be executed as a murderer; and, as a matter of fact, the principle is frequently violated in practice while it continues to be upheld in theory. Assuredly this is a mischievous thing, which cannot better be condemned than in the words used by Hoffbauer in reference to another matter:-" All legislation ought to be founded on a knowledge of the object to which it is applied. If this knowledge is defective, it would be much better that the law should not define at all than that it should make a bad definition, and introduce errors which, although contrary to its purpose, are perpetuated by its authority."

The ordinary medical doctrine, which has been formulated as an induction from the practical observation of insanity, is that this so-called monomania, or, as it is called by English jurists, partial insanity or partial delusion, excludes the idea of criminality, and takes from the affected person all responsibility for his actions, whether or not these are the results of the delusion under which he labours. Let us weigh the value of the opposing dogmata. In the first place, the legal dogma is open to criticism from its own basis. It is not true that a person who has a delusion, and acts under its influence, has necessarily lost his knowledge of right and wrong in the particular case, or the power to control his actions in relation to his delusion; he may know quite well that what he does is contrary to law and will entail punishment, and the knowledge that other persons will consider it wrong and treat it as a crime may so far influence him as to prevent him from yielding to his own impulses. Nothing is more certain than that a monomaniac will sometimes conceal or deny his delusions, dissemble-his feelings, and regulate his conduct accordingly, when he has a strong motive to do so, whether this be a lively fear of suffering or a strong hope of gain: he is neither without knowledge nor without power of control. In truth, it might often be justly said of such an one acting under a delusion that, although his knowledge is more at fault, he has greater power of control than the person who acts under a desperate insane impulse, and that he is, therefore, so far as culpability can be attached to madness, the more culpable of the two. The legal doctrine thus breaks down in its application to the cases which it is supposed to specially cover: it is "hoist with its own petard." If English jurists would be logical, they must insist on the propriety of hanging an insane person who does murder under the influence of delusion, unless it can be clearly shown that he did not know the act was wrong; the burden of proving the incapacitating degree of his insanity being laid upon the lunatic in this as in other cases.

The medical doctrine, by which monomania is held to exclude criminality, is founded mainly on the three following considerations: first, that a delusion may be concealed, wherefore it might be overlooked, although it had actually affected the conduct; secondly, that it is impossible to follow the workings of an unsound mind and to discriminate between a healthy and a morbid action thereof, it being beyond dispute that an act which a looker-on cannot discover to have any manner of connection with the delusion may still be the insanely logical outcome of it; and, thirdly, that it is impossible to isolate an insane delusion and thus to prevent the infection of its morbid nature from spreading, it being certain that the whole disorder in monomania is not restricted to one delusive idea, that the rest of the mind is in a more or less marked state of moral or affective alienation-in a state, therefore, in which insane impulses to acts of violence are likely to occur. The sum of the matter is that, in the condition called monomania, there is usually a much deeper and more general mental derangement than is supposed, and that it is impossible, in estimating the cause of particular conduct, so to isolate the operation of the partial insanity as to be able to say that the crime is unconnected with it. I shall say a few words on each of the above-mentioned considerations separately.

(a) It would be easy to fill pages with stories exhibiting the extreme reticence which the insane sometimes display with regard to their delusions; but two or three instances will be enough. A commissioner who was sent to Bicêtre in order to set at liberty those whom he should judge to have recovered, examined an old vine-dresser who, in his replies to questions, gave no indication of madness and uttered no incoherent expressions. The order was prepared, according to form, for his release, to which he had to put his signature; he took the pen and wrote the name of "Christ." Esquirol attended a gentleman who had made several attempts to destroy himself; he would ask for a pistol to shoot himself, saving, "I am tired of life." He betrayed no illusion, and was generally cheerful. It was not until after two years that he confessed that he laboured under hallucinations of sight and hearing: he believed himself to be pursued by officers of the police; saw and heard them, as he thought, through the apertures of his apartment, the walls of which he asserted were made of panels so arranged that all he said and did might be perceived from without. Dr. Hood had under his care a patient who was placed in Bethlehem Hospital for having annoyed the Queen on one occasion in Rotten Row by presenting a petition to her praying for some

place under Government, and who was detained there for twenty years. For the last fifteen years he was there he had shown no symptom of his particular form of insanity, and for the last eight years no symptom of insanity at all. After a very strong effort Dr. Hood obtained his discharge; but he had not been gone five months before he was sent back to the hospital, having addressed three or four letters to the Queen asking for the hand of Princess Alice. Again, it is well known that some melancholic patients are so silent that it is only after their recovery we discover what their delusions really were, although these may have been of an extreme character, and may have dictated the most extraordinary conduct, and occasioned the most grievous suffering to themselves. How, then, is it possible in such cases to determine what actions are or are not in relation with the delusions? times is the asylum-physician perplexed to divine what are the unexpressed delusions that are holding possession of his patient's mind and governing his conduct. If he could always do so, his duties would be far less anxious than they are now; but he might take the most acute counsel of any court, place him before patients whose lives were under the sway of delusions, and defy him with all his skill in examination and cross-examination to elicit what those delusions were. If he himself can guess, it is only because his conjectures are informed by past experience. Many a gibing sneer and ill-timed jest at medical testimony in courts of justice would be spared if those who utter them so glibly were to spend a few months in an asylum, and thus to bring home to their minds the extraordinary inconsistencies and the startling inexplicabilities displayed in the thoughts, feelings, and acts of those who dwell therein.

(b) Few who have heard the accounts which insane persons sometimes give of the motives which have influenced their acts would venture to say positively that a particular act was unconnected with their known delusions, however independent of them it might seem to be. It is not true, in fact, that a madman reasons and acts logically from the false premiss of his delusion; and it is monstrous in theory to assume that a belief which itself exists only in violation of all reason should conform in its action to laws which govern the action of, and are therefore appreciable by, a sound intelligence. If this were so, it would not be difficult to predict exactly from the character of his delusion what an insane person might do, and so to preclude mischief on all occasions. But the difficulty of their care, that which constitutes the chief anxiety in the management of them, is that, although we may know what they think, we cannot foretell what they will do; we may know full well their delusions, but we cannot follow the workings of them in their minds and foresee their outcome in action: there is an incoherence between their ideas, and there is an incoherence between their ideas and actions. Locke's well-known saying, that madmen reason correctly from false premises, is indeed far from true of all cases; they often reason insanely from insane premises; they do not do those things which, were their delusions true beliefs, they ought to do, and they do those things which, were their delusions true beliefs, they ought not to do, and there is no health of mind in them. Who, then, but a metaphysician adoring his theories and ignoring facts, would venture to declare how far an act had been influenced by a delusion?

There is a well-known case, which has been quoted by writers on medical jurisprudence, of a young man affected with some degree of imbecility, who was of childish manners, and evinced a strong propensity for windmills: he would go any distance to see a windmill, and would sit watching one for days together. His friends, hoping to do him good by a change of place, removed him to a part of the country where there were no windmills. On one occasion he set fire to the house in which he was placed, and on another occasion he enticed a child into a wood, and, in attempting to murder it, cut and mangled its limbs with a knife in a horrible manner. Before these outbreaks he had never shown any dangerous propensities. Had all the professors of logic and moral philosophy in the country been set to work to discover the motive of his dangerous acts, it is probable that they would have failed to do so. And yet it was very simple: he had done them in order that he might be removed to some place where there were windmills.

From time to time I see a gentleman who has been confined for some years in an asylum, having been placed there as a criminal lunatic. For some time before he was put under restraint he had alarmed his friends by his conduct, had flourished a loaded re-

volver in the street, and had at last struck on the He head with an axe a cab-horse as he drove past it. was acquitted at his trial on the ground of insanity. He had at the time the delusion that he was Jesus Christ, but soon after he was placed in confinement he was calm and courteous in behaviour, rational in conversation, and so sane apparently that his wife made strong and repeated representations to the authorities in order to obtain his discharge. On two occasions he was examined at her request by two eminent physicians, who could find no insanity in him, and strongly recommended his discharge. And yet this gentleman, as it appeared afterwards, believed all the while that he was Jesus Christ, and had made the attack on the cab-horse in consequence of that delusion: he wished by the publicity which he would thus gain to attract attention to his mission. Insane enough to conceive and act upon such a motive he was still intelligent enough to appear so sane as to deceive two physicians, who were informed what had been his delusion and what he had done. Given the act alone, could any one, however acute in the analysis of motives, have guessed the motive of it? Given the delusion alone, could any one, however much experience of insanity he might have had, have predicted the course of action pursued? Given the delusion and the act, what sane mind could, without help from the patient-which for years he would not give-have made known the connection which actually existed between them? one occasion I spent an hour with this gentleman, endeavouring to elicit from him evidence of the delusion which I was sure he had, and an explanation of the motive of the act, which I was sure was an insane one. He was quiet and gentlemanly throughout the interview: but although I was convinced of his derangement from his inability or unwillingness to give any rational explanation of what he had done, and from certain marks of what seemed weakness of mind, I was not able to elicit any fact which would have sufficed to found a certificate of insanity upon. I may say, however, in excuse of my failure, that he had for some years been living a quiet and regular life in an asylum, free from cares and excitement, and that there was reason to believe he had been schooled to conceal his delusion by those who were striving to obtain his discharge. It was the more remarkable that a person who was capable of so much selfcontrol should ever have acted in so insane a manner, and from what, even were the delusion regarded as truth, must still be deemed so insane a motive.

The example illustrates the absurdity of imposing on a sane mind the task of diving into the troubled depths of a lunatic's mind, and tracking the incoherencies of his disordered thoughts and feelings; of tracing the connection between mental phenomena, the essential character of which is that they are not coherent, that they follow one another in no logical relation, not in an order but in a disorder of association opposed to all the experience of sanity. If a sane person could succeed in doing this it could be only on one condition—namely, that he should become as insane as the person whose mind he was studying: in that way only could he follow

and appreciate its insane reasonings. The delusion is not itself the disease, it is only a striking symptom of the disease; and it is certain that the criminal act may be a manifestation of the disease of which the delusion is a symptom, and that no connection between them may be detectable by a looker-on, notwithstanding the existence of a real pathological connection.

(c) When an insane delusion exists in the mind, however circumscribed the range of its action may seem to be, the rest of the mind is certainly not sound; on the contrary, it is in a condition in which not only do impulses that are in relation with the delusion acquire an irresistible force, but in which unaccountable impulses spring up without relation to it. Outside the recognised circle of morbid ideas there will be found, if a sufficiently careful examination be made by a competent person who knows the individual or knows the disease, evidence of mental disorder—evidence of such loss or perversion of natural feelings, such change of character and habits. such excitability of disposition, with loss of self-control. and such weakening of mind, as constitute a general alienation apart from the particular delusions. He is centred in himself, and it is a morbid self; social feelings wane or are extinguished; his intelligence is so far weakened that what he perceives at once to be the grossest folly in another, he cannot perceive to be any folly in himself; if he be sent to an asylum, it is extraordinary how little able he seems to be to realise why he is there, and, in some instances, what a strangely imperfect appreciation he shows of the derangement of other inmates. His delusions, which are the outgrowth of an exaggerated egoism, drain into themselves the energy or vitality of all his mental processes; his mind is not unsound upon one point, but an unsound mind expresses itself in a particular morbid action. An insane delusion will not spring up and grow in an unsuitable soil, and the soil which is suited to it is insanity: let that soil be changed to one of sanity—in other words, let the mind apart from the delusion be sound, and this will dwindle and die. If a so-called monomaniac has the delusion that his wife, whom he has hitherto loved and trusted entirely, is dishonouring or conspiring against him, the existence of a delusion so foreign to the whole habit of his healthy thought and feeling marks a deeper and more general derangement of mind, and it is impossible to foresee the extent of its possible influence upon his conduct.

At a meeting of the Société Medico-Psychologique of Paris in 1872, Dr. Foville gave some interesting information as to the effects of the war upon certain patients who were labouring under a partial delirium, having delusions of persecution, and who would commonly be called monomaniacs. One patient who read the newspapers regularly, and appeared to follow all the events in a very intelligent manner, affirmed that he was not fool enough to accept as real either the accounts which he read or the incessant discharge of artillery which he heard; that all the noise which he heard was produced by some fools who pretended to fire the cannon to amuse themselves, but whose

real end was to cause him to lose all patience, and to have a pretext for causing him to perish of hunger by reducing more and more the allowance of food. Another patient repeated daily that the pretended war was only a comedy, all the scenes of which had been previously arranged between the Prussians and French; that the guns and cannons were only loaded with powder; and that all reports as to the number of killed and wounded Doubtless many people were were pure invention. caught with the farce, but he was not one of them. A more remarkable case still was that of a captain of the Imperial Guard, who was admitted into Charenton some weeks only before the declaration of war, and who laboured under delusions of persecution. It might have been expected from his profession, from his having numerous relatives in the army, from his comparative lucidness—which on many subjects was perfect—that he would have been most interested in the military events. and would have followed the disasters of the war with the greatest attention. But it was exactly the opposite. All the defeats and sieges of the war, the fall of the Empire, the investment of Paris, the conflicts before it. various episodes of which he saw with his own eyes, the bombardment of the forts, which he heard incessantly, the capitulation of Paris and its deplorable consequences -all were to him as if they had never happened. Each event was related to him by several people, but he would not believe a word of what he was told; all means were employed to convince him, but without success; he resisted all arguments, replying to them by taking

exception to them or by systematic denial. He never ceased to maintain that France was at peace, the Emperor at the Tuileries, that all means of communication were open, and that the authorities of the asylum made common cause with his persecutors by refusing to forward his letters to his relatives, and by witholding their answers to him: that all the noise made about the house by the cannonading was the work of some officers of his regiment—his open enemies, who were bent upon annoying him, and whom he mentioned by name. One day he was shown five or six different newspapers, all of them of the same date, relating to the same facts; he read them with the same incredulity, maintaining that they were all sham newspapers, printed for him alone by his persecutors, so determined were they not to desist, cost them what it might.

Certainly, as Foville observes, these facts are of a nature to shake very strongly the theory according to which, through the mutual independence of the faculties, there is supposed to be but a partial lesion of them in monomania, without a general alteration in their harmony. No one could believe, unless he was convinced by experience, how great and general may be the loss of power of appreciation, the impairment of intelligence, and the lesion of judgment manifested by insane persons who appear rational on all save one or two subjects; in no case can we predict how much madness the application of a sufficient test may discover; we can predict only that it will elicit a great deal more than appears on the surface. Nor will the evidence of it be wanting in his

conduct: inside an asylum, where his life is regular and monotonous, the so-called monomaniac may go on calmly from day to day, doing the simple duties set before him; but if he be left to his own devices in the world, and especially if he be placed under conditions which impose a strain upon his mental resources, impulses of which neither he nor any one else can give a rational explanation are apt to arise in his mind and to realise themselves in his conduct.

In order to form a conception of the nature of these frantic impulses, we must compare them with convulsive movements, which are the expressions of a morbid condition in the motor-centres similar to that from which they originate in the mindcentres. Both in physiological and pathological actions we have instances of movements which take place in what is called sympathy with others, without having a manifest connection with them; as, for example, the useless contortions of the facial muscles which are so marked in some persons when making a muscular exertion, and certain convulsive movements which, accompanying other directly caused convulsions, we describe as sympathetically excited. They occur together, although we do not see why they should do so, just as in like manner sensations excited in one part of the body will sometimes occasion sensations in another part, without our being able to assign a reason for the concomitance; for to call them sympathetic is not an explanation; it is merely to use a general name to bind together and denote a class of phenomena which, occurring together.

we cannot at present explain the connection of. The lesson which they teach us may, however, be profitably applied to the study of the function of the higher nervecentres-those which minister to mind: an active morbid idea in the mind may excite into activity another idea which has no discoverable relation to it in consciousness, and this last may realise itself in some deed, which, so far as the primary idea is concerned, seems inexplicable; there may, in fact, be a synergy of idea, as there is notably a synergy of movement, or a sympathy of sensation. A poor woman, the mother of two children, became depressed, and fancied that she was persecuted: she was also suicidal, but went about her daily duties with regularity. One day, however, without seeming anywise different from usual, she seized one of her children. and beat its head against the floor until it was dead: and she would have done the same with the other child had she not been prevented. She was sent to an asylum, where she recovered after a time; but she never could tell how it was that she had killed her child. when she was so fond of it.

The case is one of a class of cases in which frightful impulses spring up in the diseased mind, and drive the individual to a deed of violence; they may be as little within control as are the convulsions of epilepsy, and the origin of them perhaps as little within the individual's knowledge as the origin of the impulse which entered the unfortunate herd of swine, and drove them over a steep place into the sea, so that they were drowned, was within their knowledge.

The right problem for a court of justice to place before a scientific witness is to trace a connection not between the delusion and the act, which may be undetectable—or, if detectable, such as would not excuse the act if the delusion were true—but between the disease and the act. Certainly, it is an extraordinary demand to make, that when two symptoms of disease exist, the delusion and the criminal act, the one should be proved-to be the cause of the other; that the effects of a common cause should be proved to be cause and effect. Out of the depths of deranged feeling in which the delusion is rooted there may spring up at any moment insane impulses, which are quite independent of it, but which, like it, are born of the disease.

Thus much, then, with regard to the cases of homicidal insanity in which there is a distinct delusion and the homicide has or has not an evident connection with it. In the next chapter I shall say something specially of homicide in connection with epilepsy.

## CHAPTER VII.

## EPILEPTIC INSANITY.

Mania following epilepsy: its furious character—Masked epilepsy—Meutal disorder preceding the epileptic attack—Epileptiform neurosis manifesting itself in periodical attacks of mental derangement: examples—Description of the symptoms of epileptic insanity: of those that go before and foretell an attack; of those that are exhibited in the milder and the more severe forms of the disease; and of those that are met with after long-continued epilepsy—Peculiar states of epileptic conscionsness—Epileptic visions—Transitory mania of epileptic origin: examples—Features or epileptic homicide—Transitory mania, without history of epilepsy—Somnambulism—The persistence of dream-hallucinations after waking from sleep.

When a murder has been committed without apparent motive, and the reason of it seems inexplicable, it may chance that the perpetrator is found on inquiry to be afflicted with epilepsy. It is an important question, then, how far the existence of this disease affects his responsibility. At the outset we may declare unhesitatingly that an epileptic person may be quite as sane as one who is not so afflicted, and, in the event of his doing murder, quite as responsible; though his passions are more violent, in the intervals between the fits there may be nothing to warrant the slightest suspicion of any mental disorder. But it is an undoubted effect of epilepsy in some instances, as the experience of every asylum testifies, to produce mental derangement of a furious kind; and the nearer we get to the fit, the more

reason is there to suspect that the mind may have been affected; wherefore an old author, Zacchias, declared that every epileptic ought to be regarded as irresponsible for acts committed by him within three days before or after an epileptic attack. Without subscribing to this arbitrary limit, we certainly ought to scrutinise closely the forms of mental disorder which, occurring immediately before or after an attack, have led to the enunciation of such an opinion.

What happens frequently in asylum epileptics is this: that after a fit, or a succession of fits, there follows a brief attack of furious mania, which is known as epileptic mania. On account of its violent and destructive character, it is a most dangerous form of insanity; for the patient, in a frenzy of excitement, unconscious of what he is doing, his senses perhaps possessed with frightful hallucinations, is driven to most destructive acts of violence against both animate and inanimate objects. After the excitement has lasted for a few days, or it may be only a few hours or a few minutes, it subsides, and the person comes to himself; if he has injured or killed some one in his fury, he realises for the first time what he has done. During the intervals between these epileptic and maniacal paroxysms, which may be intervals of weeks or months, he is calm and sensible: there may be no mental impairment whatever at first, although after the disease has lasted for some time there will be loss of memory and weakness of mind, deepening

into actual dementia in the worst cases. It is one of the saddest experiences of asylum life to witness the pitiful fate of those patients who have not sunk below the consciousness of their condition. Gentle, amiable, and industrious through their long intervals of lucidity, they hope against hope that each recurring paroxysm will be the last; they cagerly try all remedies, in the hope of curing the disease; they see others leave the asylum restored to health, and confidently anticipate that their turn will also come; but confidence wanes as the attacks recur, the mind is slowly weakened by the storms of fury through which it passes, and they sink finally into the apathy of dementia—a state of mere oblivion, in which they cease to hope or care more.

This is one form of epileptic insanity in which homicide is sometimes done. When the disease has been so well established that it has been found necessary to send the patient to an asylum, there will be no difficulty in recognising its nature, but when the mania follows the epileptic attack for the first time, and especially when it passes off after lasting for a few hours only, it is obvious that it might easily be overlooked. If the unfortunate sufferer has killed some one under these circumstances. and has not chanced to come under the observation of a skilled observer, it may go hard with him when he is put on his trial for murder. The character of the deed itself in such case may have the greatest significance; if it has been done with great violence, without indications of premeditation, without apparent motive, and without secrecy, and if the accused person is discovered to be the victim of epilepsy, it is probable that it has been done in a paroxysm following an epileptic fit.

A second form of epileptic insanity in which homicide is sometimes done is really a masked epilepsy; a transitory mania occurring in lieu of the usual convulsions. Instead of the morbid action affecting the motor centres and issuing in a paroxysm of convulsions, it fixes upon the mind-centres and issues in a paroxysm of mania, which is, so to speak, an epilepsy of mind. Many cases of so-called transitory mania (mania transitoria) are really cases of this kind-cases of mental epilepsy. Both forms of mania may occur in the same patient at different times: his fits may be followed by mania, as is most often the case, or he may now and then have a maniacal taking the place of an epileptic paroxysm. Thus, in one case of epilepsy complicated with mania there were three kinds of symptoms at different times: (1)—Epilepsy pure and simple: (2) Epilepsy followed by violent delirium, chiefly of action, in which the patient tumbled about on the ground in an extraordinary manner with great rapidity without speaking a word, this condition, during which intelligence and sensibility were abolished, lasting for ten minutes; (3) An attack of mania without epilepsy, the patient falling, after the excitement, into an almost ecstatic state, from which he returned slowly to reason. Between these attacks he was quite sensible. practical lesson which cases of this kind teach is, that in the event of homicide we must not insist on its being proved in every case that actual convulsions had occurred; for the instance may be one of masked epilepsy.

A third form of mental disorder occurring in connection with epilepsy, and marked sometimes by a homicidal

outbreak, is that which is observed now and then before the fits come on. Before their access a notable change often takes place in the character of the asylum-epileptic: instead of being, as he usually is, amiable and gentle, he becomes suspicious, sullen, and surly, and whereas he is generally ready to talk cheerfully, he will not answer at all, if addressed, or will answer shortly and surlily, or may answer with a blow; he displays uncontrollable anger with or without some slight cause, and reckless violence; the most indifferent question or remark, or the slightest accidental touch, may cause an outbreak of the extremest fury; wherefore he is, if much interfered with, most dangerous to others. With this condition of profound moral perversion, delusions of suspicion and hallucination of a vivid nature may or may not be associated: if he sets fire to a house, or kills some one, or does some other act of violence, it is either that he is overwhelmed with such a vague, vast, and painful feeling of mingled fear and apprehension, that he must find relief in convulsive action, or that he acts under the influence of some hallucination or delusion, or there may be a combination of these mental states. In due course the fits occur, the cloud of disordered feeling passes from the mind, suspicions and delusions disappear, and, after a short period of mental confusion and stupor, he returns to his amiable and gentle state, remaining so until an exactly similar moral change foretells the approach of the fits on another occasion.

As an illustration of the danger of this kind of mental disorder take the following case:—A patient, aged thirty years, confined in the French asylum at Avignon, was

subject to severe epileptic fits from time to time. On one occasion after an attack he threw himself out of the window: on another occasion he seemed exhausted and desired to embrace his father, whom, but for help given, he would have strangled; on other occasions he was maniacal, and would kill everybody who came near him. In the intervals between the attacks he was sensible, pleasant, and amiable, though a little vain, as is common with such patients, and considering himself superior to the other inmates. He was attached to the Superintendent, who granted him indulgences, and for whom he worked willingly. Towards the end of March he had a succession of epileptic fits for two or three days, which were followed by incoherence, hallucinations, and great excitement. At the beginning of April he had a single fit. On the 21st of the month he held out his hand to the Superintendent whom he met, and uttered the word "Union," but otherwise exhibited no difference from his ordinary state. Next day he was still calm, but sombre. On the 23rd he was standing in a passage as the Superintendent passed; he pretended to have a pain in the leg, and as the latter stooped down to examine it, he stabbed him violently to the heart with a pair of scissors, so that death took place in an hour and a half afterwards. In the following night he had an epileptic attack. When questioned about what he had done, he said that for some nights he had heard the voices of the members of a secret society, telling him that if he did not kill the Superintendent he would be miserable all his life. uttered the word "Union" to ascertain whether the Superintendent had any connection with these voices and belonged to the secret society. After the fatal act the epileptic attacks were more frequent for some time, the mental disorder was greater, and the lucid intervals were rarer and shorter, but during them he was sorry for what he had done.

Lastly, let me note that epileptic insanity, manifesting itself chiefly by irritability, suspicion, moroseness, and perversion of character, with periodical exacerbations of excitement, in which vicious or criminal acts are perpetrated, showing itself, in fact, in a profound moral or affective derangement, may occur periodically from time to time for months or even years before distinct epileptic fits declare themselves, these at last making their appearance, and supplying the interpretation of the previously obscure attacks of recurrent derangement. Morel has pointed out that some cases of homicidal and suicidal mania are really cases of this kind in which an epileptiform neurosis has existed for a long time in an undeveloped or masked form. But as such attacks may occur periodically for some time before the access of genuine epilepsy, so may they also occur periodically for some time after it has ceased. Falret mentions one case in which, after epilepsy had ceased for twenty-one years, a strong impulse to homicide, which necessitated restraint, displayed itself. I shall not, however, multiply examples, but content myself with the following instances :- A man, aged sixty-two, had in his youth been subject to epilepsy, and had been discharged from the military service in consequence. After this the attacks gradually became more rare, and they finally ceased; none having been observed for forty years. There was nothing particular noticeable in him except an inclination for good living and a condition of exaltation in the spring. One day he suddenly stabbed his aged mother in the throat several times, and when she fell down he sat upon the body and stabbed her repeatedly. When he was seized, he exclaimed, "She is a villain who has done me all the injury possible; I ought to have killed her long ago." There was no discoverable motive for the crime; but it appeared that for several years during his periods of exaltation in the spring he had reviled his mother, and threatened to kill her; and the date of the murder corresponded with the period of exaltation.

A more striking case still is one related by Esquirol. A Swabian peasant, aged twenty-seven years, whose parents did not enjoy the best health, had been subject to epileptic fits from his eighth to his twenty-fifth year. But the character of his disease then underwent a change; in place of epileptic convulsions, the man found himself seized with an irresistible impulse to commit murder. He felt the approach of the homicidal paroxysm for several hours, and sometimes for a day, before it came on, and then earnestly begged to be bound, lest he should commit a crime. "When it seizes me," he said, "I must kill some one, were it only an infant." His mother and father, whom he loved dearly, were the first victims of these fits: "Mother," he cried in a loud voice, "save yourself, or I must strangle you." Before the attack he was greatly exhausted, had slight convulsive movements in the limbs, and was overpowered with a feeling of sleep, without being able to go to sleep. During the paroxysm, which lasted one or two days, he retained consciousness, and knew perfectly that if he committed murder he would be guilty of a crime; and when he was put under restraint, he made contortions and frightful grimaces, sometimes singing, and sometimes speaking in rhymes. When it was over, he cried, "Unloose me. Alas! I have suffered greatly; but I am well out of it, since I have killed no one.\*

Having thus briefly set forth the varying order of events in epilepsy complicated with mental disturbance, I shall now go on to say something more in detail of the character of the mental symptoms. They may be described under four divisions,—the first including those which sometimes go before an attack of epilepsy, and are known as its prodromata or forerunners; the second division including those which, corresponding in the mental sphere with those slighter forms of epilepsy that are known as epileptic vertigo, or the petit mal, Falret describes as a sort of petit mal; the third including the more violent symptoms which would correspond to the regular epileptic convulsions, or the so-called grand mal; and the fourth including those symptoms of mental decay which follow long-continued epilepsy, and mark what is called epileptic dementia.

First, then, with regard to the mental prodromata of epilepsy. As I have already said, some persons become

<sup>\*</sup> Other similar cases in which the cessation of epileptic fits was followed by attacks of mental epilepsy are related by Dr. Echeverria in a recent article on "Epileptic Insanity," in the American Journal of Insanity for July, 1873.

morose, surly, irritable, and quarrelsome; others exhibit great dulness of conception, enfeebled memory, confusion of ideas-in fact, a physical and mental dulness or torpor; others, on the other hand, display an unwonted gaiety, loquacity, and self-confidence, which contrast strangely with their usual dull and apathetic state. has been pointed out by Falret that in some cases the same ideas, the same recollections, or the same hallucinations recur before the attack: that on each occasion the person has the same vivid mental impression, or sees the same spectral illusions, or smells the same odour, or hears the same voice uttering the same words; and it is curious enough that the recurring idea or image is sometimes a reproduction of that which went before, and perhaps provoked, the first attacks. We may liken it to the strange sensation which, occurring in some part of the body immediately before the loss of consciousness and the convulsions, is known as the aura epileptica. It is certain, then, that there are in many cases of epilepsy mental disturbances which, though we may call them prodromata, are really a part of the attack; and it is not a little strange, having regard to these and similar facts, that any one should ever have placed the morbid seat of epilepsy in the central or in the lower ganglia of the brain. ordinary epileptic loses consciousness before he falls down in convulsions; it would therefore seem that his supreme cerebral centres are in trouble before the storm affects the lower centres.

2. It is well known that there are some attacks of epilepsy which may be described as abortive or incomplete.

There are no convulsions, nor does there appear to be a complete loss of consciousness; the person utters a few unintelligible words, or makes some incomprehensible sounds, or he may exhibit indications of a profound but momentary terror, with or without grimaces or other slight muscular spasms, and then is himself again, quite unconscious of what has happened to him. A remarkable circumstance which has occasionally been observed in connection with these incomplete attacks is that, after the individual appears completely restored to himself, and speaks and acts as if he were so, the attack recurs, and when it has passed off and he is really himself, he remembers nothing of what he said and did in the interval of seeming lucidity; and yet this normal or apparently normal state of reason, in which he answers questions, makes remarks, and does various acts, may last for hours or even days. He may be likened to a person in a dream who, being awakened out of it, talks sensibly with some one for a short time, soon goes to sleep again, continues his interrupted dream, and, on awakening finally, has no memory of the interval during which he talked.

I have spoken of the intervening state of lucidity as a normal or apparently normal state, and such it certainly seems to be in some cases, so like his natural self does the individual appear; but in other cases it is plain that, although he converses and acts as if he were quite conscious and master of himself, he is nevertheless not really in his normal state of mind; he exhibits a loss of perception, more or less confusion of ideas or incoherence of language, or even actual delusions, and does strange

or foolish things which indicate some degree of mental aberration. Like the somnambulist, he only perceives the objects which affect his senses in so far as they are connected with the ideas and feelings which hold possession of his mind, or perceives them in the form and colour which his ideas and feelings impart to them. These peculiar states of epileptic consciousness are not only of great psychological interest, but also of practical consequence in relation to the question of responsibility; for it is obvious that deeds might be done by an individual when in the anomalous state of consciousness, of which he might have no remembrance when in his really normal state, and for which, therefore, he could not justly be deemed fully accountable.\*

It is difficult for a healthy mind to realise such a pathological state of consciousness: in order to do so, or rather—as it must be impossible to truly realise it except on the condition of the sound mind becoming unsound—in order to form an approximate conception of it, it is necessary to draw conclusions, not from the experiences of self-consciousness, but from observation of those abnormal conditions of consciousness which are manifested in insanity, in somnambulism, in the hypnotic or so-called mesmeric state, and in certain dreams, where the individual evinces some perception of things around, and acts as an apparently voluntary agent, while he is clearly living in an internal world, and is cut off by his

<sup>\*</sup> Dr. Echeverria discusses these conditions in an article on "Violence and Unconscious State of Epileptics in their relation to Medical Jurisprudence," in the American Journal of Insanity for April, 1873.

mental state from anything like an adequate appreciation of his relations to his surroundings. Some writers are in the habit of describing these anomalous states of consciousness as states of unconsciousness, moved thereto probably by the metaphysical notion of consciousness as a definite invariable entity which must either be or not be; but this is obviously a misuse of words; and what it behaves us to learn from them is that consciousness is not a constant quantity, but a condition of mind subject to manifold variations both of degree and kind.

The form of mental disorder which corresponds to the petit mal or epileptic vertigo may be described as a great confusion of ideas accompanied often by instantaneous impulses to violence. Those afflicted by it become sad and morose without any cause in external circumstances; are profoundly distressed, and exhibit much irritation against those who are about them; suffer from loss of memory and dulness of intelligence, so that they cannot collect and fix their thoughts; feel sadly that they are no longer themselves, that they are impelled to strange or violent acts by a power which they cannot resist: oppressed by a vague anxiety or dread, they leave their homes and wander about the streets or the country; all the painful ideas which they have conceived at different periods of their lives come back and fasten upon their minds; they are overwhelmed with a vague anxiety and terror. In this state of confusion and distress they accuse their friends of hostility, and imagine persecutions which have no existence out of their morbid fancies; and they do unlawful deeds, such as theft, incendiarism,

suicide, or homicide; some relieving themselves by destroying inanimate objects, others killing themselves in order to get rid of their anxieties and fears, and others attacking, in a blind and desperate manner, persons whom they chance to meet when their terror and distress have rendered their impulses uncontrollable. The deed of violence done, either there is immediate relief, the indefinable anxiety and confusion of ideas disappearing, and they recognize what they have done; or they continue in a state of excitement, unconscious, or very imperfectly conscious, of the gravity of their acts. When they come to themselves, their memory is uncertain and confused. like that of a person awaking from a terrible nightmare: they may remember the facts in a fragmentary way when they are recalled to their minds, or may deny them altogether. Let him who would realize, so far as it can be done by a sane mind, the mental state of these afflicted beings, try to recollect the most painful dream which he ever had; let him reflect on its grotesque inconsistencies, the blest relief which he experienced when he awoke and found it was a dream, the fragmentary remembrance which he retained of it, and the little desire which he had to live it over again in memory; let him then suppose it to be no dream, but conceive himself to be overwhelmed by the horrible nightmare day after day, and to be, as he surely would be, incapable of even the hope of relief: what cry would then suffice to express his agony and despair save the cry of supreme agony, "My God. my God, why hast thou forsaken me?"-what act save an act of suicide?

3. Another form of epileptic mania is of a furious character throughout its course, and may be compared in the mental sphere with the so-called grand mal or genuine epileptic convulsions. It differs from other forms of mania in its sudden invasion; either there are no premonitory symptoms, or they occur only a few hours They are headache, redness and before the attack. brilliancy of the eyes, alteration of voice, slight convulsive movements of face or limbs, or sadness, irritability, and slight excitement. A second character, which is common to other forms of recurrent mania, is the close resemblance of one attack to another in its prodromata, symptoms, course, and termination; the same ideas, the same words, the same acts, are observed on each occasion; the attacks are almost as much alike as one epileptic fit is like another. Another character is the extreme violence of the mania, which makes those who suffer from it the terror and danger of an asylum. There are frequent hallucinations of the senses: threatening voices in the ears, overpowering odours in the nostrils, flames of fire or the redness of blood before the eyes. Terrifying ideas have possession of their minds; they see in those around them assassins who threaten their lives: and their fury is uncontrollable. Nevertheless, it is remarkable, considering their extreme fury, that their words are much less incoherent usually than those of other insane persons who are equally excited; they comprehend and reply to questions more directly, and are more conscious of their surroundings; and yet, in singular contrast with this feature, they exhibit an almost complete loss of memory of the attack after it has passed off. The mania is usually of short duration, lasting only for a few days, and sometimes only for a few hours, and ceases as suddenly as it came on; there is perhaps a short period of torpor, and the person is himself again, without remembering clearly, if he remember at all, what has happened. Between this form of general mania and the previously described form of partial mania it should be understood that there is every degree of variation exhibited in different cases.

4. Lastly, the result of long-continued epilepsy is to impair and weaken the mind, producing, first, failure of memory, and ultimately a condition of dementia. In some instances this impairment affects principally, at any rate at the commencement, the moral faculties, giving rise to a state of moral imbecility or insanity; but, in the end, both moral and intellectual faculties are involved in a common ruin. Outbreaks of great maniacal excitement continue to occur from time to time in these cases.

The classes of symptoms which I have thus briefly described include those which most commonly occur in connection with epilepsy, but it must not be supposed that other forms of mental disorder are not sometimes met with in connection with it; there is hardly a form of mental derangement that has not been found associated with it in occasional instances. A feature which is often very notable in epileptics is an exaggerated development of the religious sentiment, whereby it comes to pass that they see visions, and perhaps announce themselves as

the organs of special revelations from on high.\* Like Swedenborg, they are sometimes carried up into heaven while yet in the flesh, and have conferences with angels, prophets, and even with the Supreme; or, like Mahomet, they are visited by angels, and are invested with a prophetic mission. Their visions, in fact, resemble very closely those which are said to have been seen by certain religious enthusiasts, and which have been the origin of certain religious creeds.† It will be the interesting work of a future inductive psychology to examine and point out how many supposed revelations of the supernatural, and how many theological beliefs founded on such revelations, have been the results of deranged nervous function—a deranged mentalism, if I may be permitted to coin such a word—of an epileptic or allied nature.

It is important to bear in mind that the existence of epilepsy may be overlooked for some time in a person even by medical men, and this is perhaps more likely to be the case when there is a mental alienation which absorbs the attention. Attacks of epileptic vertigo are sometimes so slight that they are thought to be merely transient attacks of giddiness or faintness; and it is

<sup>\*</sup> There is an interesting paper on "The Religious Sentiment in Epileptics," by James C. Howden, M.D., in the *Journal of Mental Science* for January, 1873.

<sup>†</sup> An interesting chapter might be written upon the mental characteristics of the epileptic neurosis. There is the immense energy, such as was exemplified in Mahomet, Napoleon, &c. Then there is a singularly vivid imagination, which is apt sometimes to occupy itself with painful or repulsive subjects. Probably the invention of the modern sensational novel, with its murders, bigamies, and other crimes, was an achievement of the epileptic imagination.

notorious that patients labouring under them will often seek advice on account of some ailment which they attribute to the stomach or the liver, the real nature of their malady only being elicited by accident, or by questions aimed to discover what is suspected. Another reason why epilepsy is overlooked is because the attacks often occur in the night only, and the person may then be unaware that he has had them. These things considered, it is extremely probable that many cases of socalled transitory mania might, if a careful enough examination were made, be found to be connected with epilepsy in some form or other. Delasiauve, who has insisted much on the frequency with which epilepsy exists undetected, relates the following instance:-H., who had been committed to the Bicêtre, was re-admitted after murdering his mother. At the trial he had been acquitted on the ground of insanity. Epilepsy had not been suspected in his case; and at the asylum he displayed complete lucidity, with the exception of short occasional excitements, up to his death, which occurred not long after his return to the asylum. Certain circumstances, however, led M. Delasiauve to suspect epilepsy, and on inquiry he was able to trace his temporary aberrations, and therefore his overt acts, to previous nocturnal fits.

He mentions another case of a young man, well bred, educated, and belonging to a respectable family, who was sent to prison for stealing. From prison he was transferred to the Bicètre on account of repeated epileptic fits. It was then ascertained that he had

been subject to epilepsy for years, and it became evident that the theft had been the result of mental disorder connected with the disease. He manifested two quite different natures. The one was limited to about a week before and after the fits, when he was irritable, gloomy, intemperate, prone to violence, and capable of every imaginable mischief. It was mainly at this time that, while preserving sufficient lucidity to execute intentionally an act, he failed in the necessary discernment to judge of its morality, as also in the necessary self-control to abstain from doing it. During the other condition, which was the normal one, his character was quite a contrast; it was that of a man in the full possession of his senses, and free from any extravagance. Sometimes in place of this moral insanity there was an attack of incoherent and furious mania. What shall be said of the philosophy which would acknowledge the intellectual mania to be the result of disease, and yet declare the moral mania to be nothing more than depravity?

It cannot be said that there are special features so distinctly marking an epileptic homicide as to enable us to identify it on every occasion; but those which will commonly be observed are an absence of intelligible motive, an absence of premeditation, great determination and ferocity in the execution, much more violence than necessary being used, an absence of secresy in the execution or of concealment afterwards, a great indifference and absence of remorse, and an incomplete and fragmentary remembrance of all the circumstances, if not a

complete forgetfulness of them.\* Certainly, when a murderer lies down quietly to sleep by the side of the person whom he has just killed, we may safely predicate something abnormal in his condition; and seeing that a heavy sleep usually follows the epileptic paroxysm, the probability is that the act was the outcome of the epileptic neurosis. It must not be supposed that the absence of motive and of premeditation which I have mentioned as features of epileptic homicide will be observed in all cases; though common, they are not constant. An insane epileptic may go about his work of murder deliberately and under the influence of a feeling of revenge or jealousy. He is not emancipated by his twofold disease from the ordinary evil passions of envy, hatred, malice, and jealousy; but, in estimating his accountability, it is not right to permit the evil passions to engage all our attention, and to forget that it is an insane person who is under their influence, and that they may be delusive morbid feelings, if they are not actually the cause or the offspring of the delusive ideas. We are in much need of a term to denote insane feelings, which shall carry as distinct a meaning in the moral sphere. convey as definite a notion of mental derangement, as does the word delusion when applied to an insane idea. Delusion is a term which is understood by lawyers to

<sup>\* &</sup>quot;Whenever we meet with isolated acts of violence, outrages to persons, homicide, suicide, arson, which nothing seems to have instigated, and when, upon attentive examination and thorough inquiry, we find a loss of memory after the perpetration of the act, with a periodicity in the recurrence of the same act, and a brief duration, we may diagnose larval epilepsy."—J. Farlet, Annal Med. Psyc., p. 162, Jan., 1873.

mark insanity: who will help their understandings by the invention of a term which, applied to the more fundamental conditions of insane feeling and insane will, shall enable them to realise and talk of such states? The right word is always a power; it gives definiteness to conception, and makes action more clear; and it would make a mighty difference if the fit word to denote insane feeling could be found and take its place in the vocabulary.

Although epilepsy, masked or overt, will, I think, be found to be at the bottom of most cases of mania transitoria, it must be admitted that there are some cases in which there is no evidence of epilepsy in any of its forms to be found; but it may well be doubted whether a distinct insane neurosis is not always present in these cases. With such a constitutional predisposition, a genuine attack of acute insanity, lasting for a few hours only, or for a few days, may break out on the occasion of a suitable exciting cause, and during the paroxysm homicidal or other violence may be perpetrated. After childbirth it sometimes happens that a woman is seized with a paroxysm of acute mania of short duration, during which perhaps she kills her child without knowing what she is doing. The effect of alcoholic intemperance upon a person strongly predisposed to insanity, or upon one whom a former attack has left predisposed to a second, is sometimes a short but acute mania of violent character with vivid hallucinations and destructive tendencies; and a like effect may be produced by powerful moral causes, sexual excitement, and other recognised causes of insanity. On

one occasion I was summoned late at night in haste to see a young woman who was in a state of acute, violent, and incoherent mania, the whole household being in the utmost dismay. She had gone to bed complaining of nothing more than a loss of appetite and a feeling of bodily illness, and the outbreak of mental disorder was quite sudden. Suitable treatment was adopted, and in the morning the excitement had passed off, some confusion of mind only remaining: she slept heavily during the day, and was soon herself again. in young children such paroxysms have been observed. Morel records two cases in which children, one of them being ten years and a half old, the other only five years old, fell into convulsions and lost the use of speech in consequence of a great fright; afterwards a maniacal fury with destructive tendencies and continual turbulence occurred; in one case epilepsy followed, but in the other it did not. He also gives an account of a girl, aged eleven years, who had furious maniacal attacks, during which she attempted to kill her mother and injure her sisters, and who finally recovered.

Other instances of a similar kind might be mentioned, but these will suffice to illustrate the fact that a transitory mania, accompanied by homicidal and other destructive impulses, may be produced by a sufficient exciting cause in a person who has a distinct insane neurosis, just as epileptic convulsions or mania may be produced where the epileptic neurosis exists. They are really cases of acute general mania, only they are of much shorter duration than acute general mania commonly is.

There can be no difference of opinion as to the irresponsibility of a person who commits a crime when labouring under such an attack, if there be satisfactory evidence of its occurrence. A difficulty might occur when the paroxysm was very short, and when there were no witnesses to testify to its nature: coming on suddenly and passing off suddenly, it is possible that it might be overlooked. This is more likely to happen when the crime falls short of murder, as there is not then an equally merciful inclination to find an excuse, nor is an equally minute inquiry made into the person's antecedents.

While conceding unhesitatingly the occurrence of an acute attack of transitory mania on the occasion of a sufficient exciting cause, where there was an epileptic neurosis or an insane neurosis, or where there had been an injury to the head which had affected the mind at the time or afterwards, or where a previous attack of insanity had left behind it a tendency to the recurrence of the disease, I certainly hold that we ought to regard with extreme suspicion the allegation of transitory mania in excuse of crime where none of these conditions were present. Possibly there may have been a sudden outbreak of insanity which ceased as suddenly as it came on; but, unless there was strong evidence of it other than the crime, it would be proper to refuse to admit it.

Before concluding this chapter it will be convenient to say something with regard to a condition of consciousness that has some resemblance to those peculiar states of consciousness which are sometimes evinced in epilepsy; I mean the state of somnambulism. There can be no doubt that some persons may rise from their beds while asleep, go through a series of complicated actions, and retire to bed again without awaking; in the morning feeling weary, tired, and out of sorts, but remem-. bering nothing of what they have done, or remembering it only as a dream. If a crime were done by a person in this condition, there could be no question of responsibility. But it must be borne in mind that somnambulism might easily be pretended, and assuredly the assertion of its occurrence for the first time when a crime had been done would be extremely suspicious. It is really, if not itself a kind of nervous disorder, very closely allied to such nervous disorders as epilepsy, catalepsy, and hysteria; it certainly indicates a decided neurosis; wherefore if any one really was subject to it, there could hardly fail to be evidence of its previous occurrence or of distinct nervous troubles.\* Most physicians have in the course of their experience met with genuine instances of somnambulism; but few, I imagine, can call to mind an instance in which an act of homicide or incendiarism has been perpetrated during sleep. The recorded cases have been quoted over and over again by successive authors, but they do not thereby gain any more weight than attaches to the original authority, and it is no easy matter to get at this and to test its value. Having regard, however, to the complicated acts which

<sup>\*</sup> I was not aware, when this was written, that the old medical writers had pointed out the affinity between epilepsy and somnambulism. But I learn from a recently published work on Megrim and Sick Head-ache, by Dr. Liveing, that Dr. Darwin, the distinguished author of Zoonomia, noticed it, and that Dr. Prichard also called attention to it.

somnambulists unquestionably do perform in their sleep, there is certainly no reason in the nature of things why they should not set fire to the house, or commit suicide or homicide.\*

There is a condition intermediate between sleeping and waking in which, before consciousness is fully restored, the ideas and hallucinations of a dream persist for a time; so that a man, even though awake, shall think he sees the images or hears the voices of his dream. "On awaking one morning out of a distressing dream," says Spinoza in one of his letters, "just as day was breaking, the images I had had present to me in my dream floated before my eyes as distinctly as if they had been actual objects. One form in particular, that of a leprous negro, whom I had never seen in my life, presented itself to me with singular distinctness, but faded and in a great measure disappeared when, to turn my thoughts to something else, I fixed my eyes on a book; as soon, however, as I allowed my eyes to wander from the page, the vision of the blackamoor presented itself with the same vividness as before. By-and-by it began to fade, and anon it disappeared entirely." To the same effect hear Casaubon:-" Aristotle, in his treatise on Dreams, gives an instance of it in children and young boys: who after some terrible dream, though they be out of their dream, and their eyes full open (and light

<sup>\*</sup> The American newspapers have recently contained the account of a boy who in his sleep killed another boy, having left his bed in a state of somnambulism, and mounted into his victim's room by means of a ladder. When in prison, he got up in the night in a state of somnambulism, laid hold of a razor, and attempted the life of another prisoner.

brought in sometimes, which I add because I know it to be true), think nevertheless for a while after that they see with their eyes what they saw in their dream. And Vitus Amerbachius, a learned man, in his book De Animâ, lib. 4, confirms it to be true by his own experience, even when he was a man, if I mistake him not. But, whatever be the cause, the effect is certain." Most persons who have attended to their mental states will be able to furnish similar instances from their own experience.

What it is important for us to bear in mind in regard to these persistent dream-images is that, in the mental confusion of the moment, they may lead to respondent actions. There are on record well-authenticated cases in which persons who have been aroused from a frightful dream, in which they imagined that their lives were threatened, have violently attacked those who have awakened them, having seen in them the enemies from whom they dreamed they were in danger. Marc reports the following remarkable case of Bernard Schedmaizig. who awoke suddenly at night, and saw, as he believed, a frightful phantom. He twice called out, "Who is that?" and, receiving no answer, and imagining that the phantom was advancing upon him, he seized a hatchet which was beside him, attacked the spectre, and A somewhat similar case has been killed his wife. recorded: - A constable heard in the middle of the night a distressing cry of "Save my children!" proceed from a house. Hastening into it he met a woman in her night-dress, who was in the greatest confusion and excitement. Everything in the room was in disorder, and two children cowered in one corner. Their mother cried repeatedly, "Where is my child? Have you caught him? I must have thrown it out of the window." She had thrown it through one of the panes of the window, without opening it. She had dreamed that her children cried out to her that the house was on fire, and in the confusion of waking had thrown her youngest child out of the window in order to save it \*

I doubt not that in this condition of brief transitory delirium the mental state is very much like that which sometimes occurs in epileptics immediately after a fit, when on reviving to consciousness they break out into delirium: only it is of much shorter duration. It may be a question in some of these cases whether an overlooked epileptic attack, either in the form of vertigo or of convulsions, has not actually preceded the mental confusion and excitement of the half-waking delirium. However it may be caused, it ought certainly to exempt from responsibility any one who is so unfortunate as to commit violence when thus deprived of the consciousness of the nature of what he is doing.

<sup>\*</sup> Bucknill and Tuke's Manual of Psychological Medicine.

## CHAPTER VIII.

## SENILE DEMENTIA.

Symptoms of senile dementia in the order of their occurrence: loss of memory, impairment of perception, incoherent talk, incapacity of comprehension, complete mental decay—Comparison of its symptoms with those marking the natural decay of mind in old age—The mental character of old age—Failure of mind in febrile and other diseases—Loss of consciousness of personal identity—Aphasia.

In this chapter I propose to describe briefly the phenomena which mark senile dementia, forasmuch as important questions of testamentary capacity not unfrequently arise when an old person whose faculties have undergone decay makes a will which is disappointing to those who have been looking forward to be his heirs. These phenomena have the further interest of exhibiting in a striking way the progressive decay of mind which accompanies decay of brain; a decay which in some instances almost reaches mental extinction before bodily dissolution. At the outset the natural decline of the mental faculties which in greater or less degree commonly accompanies the bodily decline of old age, should be distinguished from that greater loss of mental power which is known as senile dementia; notwithstanding that between the least degree of the former and the worst stages of the latter there are all degrees of transition. It will be easily seen, then, that difficult medico-legal inquiries must sometimes occur in such cases, and that the decision, whatever it be, may challenge criticism.

The first marked symptom of the mental decay of senile dementia is an impairment of memory, especially of recent events. The past may be recalled with exactness; but recent impressions make no mark, soon pass away, and are forgotten. It is not that they are not rightly apprehended at the time, for at this early stage perception takes place properly, but they are not retained. So it happens that the visit of a friend, or some similar event, which caused interest at the time, is clean forgotten after a few days, while a similar event of former years is remembered accurately. Because of the way in which impressions occasioned by present circumstances slip from the mind, while the ideas of the past abide, there is a want of connection between the circumstances of daily life and the habitual thoughts, and the person may talk and act in a way that is inconsistent with actual facts. Suppose him to have received notice of some property having been left to him, or of the death of some one whom he intended to remember in his will, it is quite possible that he might forget it, while retaining unimpaired, or not greatly impaired, the power of reasoning within the sphere of his recollection, and while remaining, therefore, capable of making a just and rational disposition of such property as he knew he possessed, and of doing right to those who were present to his mind. Or it may happen that, having made his will, he straightway forgets that he has done so, and begins after a short time to talk again of making his will. Hence there is often in such a case the appearance

of a far greater mental aberration than the facts, when closely examined, really betoken. Let the attention be actively aroused by some stimulus, and the facts brought clearly to his mind, he will apprehend them correctly and pass a sound judgment upon them, although a few hours or a few days afterwards he may not, if questioned, be able to give an account of what he has said or done: he may, in fact, be capable of making a will, though incapable, by reason of loss of memory, of taking proper care of himself and of managing his affairs.

Following the failure of memory, or coincident with it in some cases, there is an impairment of the power of perception, so that the person fails ordinarily to apprehend all the qualities of an object, and so makes mistakes as to the identities of persons or places. The activity of his mind being mainly in the past, his memory of the lapse of time lost, and his perception of present circumstances blunted, trains of ideas are mistaken for realities. and he talks as if he were now in a place where he was formerly, or supposes a person whom he sees for the first time to be some one whom he knew years ago. Nevertheless, when his attention is called to the mistake, he recognises it and wonders perhaps how he could have made it, though he may make it again next day. He may sell his property and speak of it as his afterwards; ask the same question over and over again, forgetting that it has been asked and answered; not recognise one whom he had previously known well; inquire after the health of some one who has been dead for some time, or ask after the health of the person with whom he is talking as if he

were asking after it from some one else. And yet it may be proved by documents that he is all the while filling up and signing cheques correctly, keeping his accounts accurately, and making no mistake in the management of his affairs.

It is an important fact to be borne in mind that there may be great variations in his mental condition at different times according to his state of bodily health or to other causes of which we cannot always give an account. It will happen that he one day remembers an event of which he evinces no remembrance on another day, or that on one occasion he makes a mistake as to the identity of a person whom he recognises perfectly on another occasion. These variations in the degree of his memory and in the measure of his apprehension are indeed marked features of his condition. On one occasion I visited and examined an old lady, finding nothing more the matter with her mental state than loss of memory with regard to time; but when I visited her again a short time afterwards in company with her nephew, I found, after he had left the room, that she confounded him with his grandfather, regarding whom she retained the memory of some offence, and abused him accordingly, although she had seemingly recognised him when he was present and spoken kindly to him.

Matters becoming worse, as the effacing action of decay proceeds, the impairment of memory and the loss of power of perception increase. The individual fails to recognise those who are about him while constantly receiving their attentions, and forgets everything that

occurs directly it has occurred. Even the past is not remembered coherently; incidents and persons jumbled together in a confused way, and the conversation is a fragmentary and incoherent rambling. He does not recognise where he is, has no notion of the day of the week, or of the time of day, and will get up in the night insisting that it is daylight, or go to bed in the daytime; will believe that he is engaged daily in occupations which he has not touched for years, or wonder why he is not so engaged, and blame those whom he imagines to be preventing him. Conversation he cannot follow, and only understands the simplest question when it is slowly and distinctly addressed to him; or, apprehending its meaning and attempting to answer, he is incapable of carrying on the series of thoughts to the end of a sentence, his mind becomes confused and bewildered before he has uttered the half of his reply, and his expressions are consequently absurd and irrelevant. Feeling is involved with intelligence in the common "ruin of oblivion;" by the ravages of decay he is brought to the philosopher's ideal of freedom from passion, although it sometimes happens that the remembered fragment of a former grudge gives a temporary animation to the language of his dotage. Finally, he cannot comprehend a simple question, does not understand at all; and his reply, if he makes one, is utterly irrelevant and incoherent. habits are often uncleanly; he has lost even the animal instincts and propensities; and so he lingers superfluous on the stage until exhaustion or apoplexy carries him off. Before this last stage of decay is reached.

however, there are sometimes delusions with periods of excitement: he has fears that some injury is to be done to him—that he is to be robbed, ruined, or killed, does not sleep, complains and cries out, and is at times maniacal. Paroxysms of noisy excitement, with delusions and apprehensions of the character described, are, indeed, not uncommon features of senile dementia at one stage or other of its course.

Such is the course of senile dementia—a gradually increasing decay of mind until there is nothing left that we properly called mind. Let me consider briefly the manner of its beginning, and compare its symptoms with the earliest indications of that natural decay of mental power which accompanies old age. For there is a character of mind which belongs to old age. The old man is sagacious, prudent, circumspect, sober in conjecture, ripe in judgment, measured in his language as in his movements: he performs his ideas and his movements slowly and cautiously, for he has lost much of the energy and suppleness of his mind and frame; his imagination is less brilliant and fruitful, and there is a languor of his intellectual faculties, although, under the influence of an active stimulus, they may momentarily reach their former height of energy. He ceases to take interest in and to duly appreciate the present; cannot assimilate new things, but withdraws himself from participation in new movements, with which he feels no sympathy, to which he feels rather antipathy; is without initiative, shrinks from enterprise, accepts only the lessons of the past, is the laudator temporis acti, and brands often as revolution what he

ought to welcome as evolution. The diminution of the power of assimilation by the brain, which is the first result of its commencing decay, renders him incapable of truly receiving or apprehending the lessons of the present, and so deprives him of what is essential to a just comprehension and judgment of it; so that, although an old man may be helpful in council out of the stores of his experience, he is by no means to be trusted as a leader in action. Let me note, then, that his loss of power of reception or apprehension of the quality and bearing of events is the beginning of that decay which ends by natural descent in the loss of perception which is so marked a character of senile dementia. Again there is in the old man not only an unwillingness inability to receive, but an incapacity to hold retain new impressions; the brain has lost both susceptibility to impressions and its power of registering them, wherefore they pass away without permanent effect upon the mind; a condition of things marking the beginning of that decay which passes by a natural descent into the striking loss of memory of recent events in senile dementia. Furthermore, the mind of the old man fails in the power of reproduction or recollection. so that ideas cannot be recalled through the established tracks of association. Lastly, from these three causes combined-failure of apprehension, of memory, and of recollection, there is necessarily a failure of the power to combine old and new into a new product of mental activity—a failure, that is, of productive imagination. This is the commencement of that decay which finally

declares itself in the loss of power of comparison of ideas and in the incoherence of senile dementia. To these stages of failure of intellect we may add the decline of the moral faculties which commonly accompanies old age, a decline which, in dementia, may reach the stage of complete extinction of them.

It appears then from what has been said that the characters of senile dementia mark a further stage of the same kind of degeneration which is exhibited in the earliest symptoms of the mental decay of old age. It must not be supposed, however, that the transition from the latter to the former state takes place in every case, or that when it does take place, it is always a quiet and gradual decline. In some cases the occurrence of actual dementia is ushered in by a condition of excitement which gives a factitious energy to the individual, deceiving perhaps himself and his friends; he may suddenly exhibit an extraordinary activity in business or in speculation, making sales or investments of a startling kind, or he may break out into sexual, alcoholic, or other excesses; impatient of advice or opposition, he resents all interference or control. and sometimes occasions, by his conduct, no little distress and perplexity to his family. The excitement is really a sort of outburst of expiring energy, and is followed by dementia, the transition from the one to the other being sometimes quite sudden.

It is interesting to note that very similar mental symptoms to those which are produced by the braindecay of old age may be produced by other causes which inflict damage, temporary or permanent, upon the brain. We observe the same gradations of failing memory in febrile diseases, after injuries to the head, after apoplexy sometimes, and in persons broken down by intemperance. Very notable in the earlier stages of febrile diseases, and in debility after acute diseases, is the first stage of failing memory in which attention cannot be directed to a long train of thought, or to anything requiring a continued effort of mind. At a later stage of fever, it is evident that impressions do not leave any remembrance, though at the time there appears to be a perfect perception; there is apprehension followed by complete forgetfulness. At a still later period external impressions are not perceived at all, or are perceived in a manner which cannot convey any distinct notion of their relations, while trains of ideas are believed to be realities. With this incapacity of present apprehension there may be observed, as in senile dementia, a wonderful activity of past ideas and the revival of memories which had been lost, so that a person in delirium will sometimes rave in a language of which he can scarcely remember a word when in health. Lastly, a state of stupor supervenes in which the mind is entirely cut off from the external world, and in which there is no internal activity, or not more than the occasional flicker of an expiring idea. In the act of dying, when death is not sudden, the same stages of failing memory and failing mind are often passed through; and whosoever would realise what his probable mental state will be in that last scene of all. when he has the stage all to himself, and easily excites interest, however poorly he plays his part, may help himself to do so by a study of these successive stages of

mental decay. It is no wonder that the thoughts of child-hood then come back to the mind, and that the dying man sometimes babbles in words which he had never used in his riper years; and those who would make much of these expressions when they are of a religious character, would do well to reflect that they are attending upon a pathological scene, and to take heed lest they found conclusions agreeable to themselves upon the phenomena of mental decay.

In these conditions of mental decay a man may lose the consciousness of personal identity, and it were much to be wished that metaphysicians who lay such great stress on the unity of the ego, and make so much use of it in their systems of philosophy, would explain, from their point of view, the phenomena of disordered identity. Surely a mind, even though manifesting itself through broken glimpses in a damaged brain, should not lose its consciousness of personal identity—should not be ignorant whose mind it is. To the physiologist. who sees in the unity of the ego simply the full and harmonious action of the different parts of the mental organisation, it can cause no surprise that, when the defacing action of decay has destroyed centres of thought and paths of association, there should be a break of the harmony of function and a disruption of the unity of consciousness. The wonder would be if it were otherwise. It would seem quite natural that as mental function flickers irregularly and finally ceases before organic actions cease, there should be a loss of consciousness of identity before, through the death of the

body, individuality is altogether extinguished, and that which was an individual blends with external nature.

I have described specially the phenomena of senile dementia, but there are other conditions of mental impairment produced by disease which it would be too long a task to describe here: apoplexy, for example, may occasion all sorts and degrees of loss of memory, with weakness of mind, the study of which is well fitted to throw light upon the obscure relations of body and mind. There is, however, one peculiar state produced sometimes by an apopleptic attack of which I may say a few wordsnamely, an entire loss of the faculty of speech. In this condition, which is known as Aphasia, there is no loss of power over the muscles of speech, no paralysis of them; but there is a complete forgetfulness of the words which are the expressions of the thoughts; the person appears to understand in some cases all that is said to him, but he cannot answer a word; like Zacharias when he had seen the vision in the temple, he is speechless; when he attempts to speak, he either makes a vain movement of his mouth, or utters an unmeaning sound. In other cases the person does not forget words altogether, but substitutes wrong words for those which he wishes to use; wanting bread, for example, he asks for his boots, and is annoyed and angry when his boots are brought to him. When the right word is suggested to him, he may correct himself, or may show by the expression of his face that he perfectly understands it. This condition is usually associated with paralysis of the right side of the body, and has been supposed to be produced by disease

or injury of a convolution of the left side of the brain the third left frontal convolution, which has accordingly been declared by some to be the seat of the faculty of articulate language.

It is obvious that difficult questions must sometimes arise with regard to the amount of understanding which a person who is in this aphasic state actually possesses: having lost the usual means by which intelligence is manifested, there will necessarily be a difficulty in gauging the measure of it. Hence it has happened that wills made by persons suffering from aphasia have been disputed. Some observers, chief among whom was the distinguished French physician Trousseau, have maintained that the understanding is always more or less defective in aphasia, and that those persons who, having suffered from it and having recovered, have declared that all the time of their affliction they were in perfect possession of their understanding, were really mistaken about themselves. They were something like persons in dreams who fancy themselves to be reasoning profoundly and discoursing most eloquently, although all the while their ideas are incoherent, and what they say is unintelligible. It is an obvious remark that, if a man's understanding be perfect, he ought to be able to show it even though he has lost the power of articulate speech, speech being but one variety of the language of expression. He cannot write because his right hand is paralysed; but if that were all he might soon learn the not very difficult task of writing with his left hand, or might put together separate letters so as to frame the

words which he wanted. In some instances he can do so. In the St. George's Hospital Reports for 1867, Dr. William Ogle relates the case of a person who could write with his left hand words which he could not pronounce when asked, however hard he tried. His mind seemed quite clear, for he took an interest in what was going on around him, understood all that was said, listened, laughed, and expressed himself by suitable pantomine. In many other instances it unfortunately happens that there is a loss of the power of expression by writing as well as the power of verbal expression—a condition of what is called agraphia as well as a condition of aphasia: the person may understand words written as well as words spoken, but he cannot express himself either in the one way or in the other.

This is not the place to discuss the general question of the nature of aphasia, which is as interesting in a psychological point of view as it is difficult; all that we are concerned with is the practical question whether an aphasic person is competent to make a will. It is quite possible that he might not be capable of sustained thought, might have suffered some impairment of thought, feeling, and will, and yet might know the nature and amount of his property, and be competent to express his wishes with regard to the disposal of it. Certainly we should not be warranted by the facts in affirming that an aphasic person is necessarily deprived of testamentary capacity. In one case which was tried in the English Probate Court—Peacock v. Lowe—but which was compromised at the conclusion of the evidence in favour of the will, very strong

testimony as to the testator's general intelligence was given by those who were acquainted with him. He could not express himself by speech; but he kept by him a dictionary to which he used to refer, and in which he indicated the required word, and on the whole succeeded thus in conveying his meaning in an intelligible manner. On the other hand, there are undoubtedly cases of aphasia in which the intelligence is very greatly impaired, and the sufferer quite incompetent to make a will. Each case must be decided on its own merits according to the evidence of the mental condition of the person as exhibited in his general conduct and in his particular manner of making known his wishes.

## CHAPTER IX.

## THE PREVENTION OF INSANITY.

Man's power over himself to prevent insanity-Outcomes of an insane temperament-The exercise of self-control in insanity-The gradual evolution of character—The development of will: its power over the thoughts and fcelings-The propagation of insanity through generations-Unwise marriages-The tyranny of the passion of love-The degeneration and regeneration of families—The intensification of the ncurotic type—Hereditary predisposition, intemperance, and mental anxieties as causes of insanity—Exposition of the evil effects of intemperance—The prevention of insanity by education—The aim of a liberal education-Self-culture as an aim in life-Inconsistencies of thought, feeling, and actions: the injury to character which they imply—The kind of mental activity involved in the conduct of business: how it fails to satisfy the requirements of true mental culture -Mistaken views of religious duties-The control of the emotions-Mental hard work not a cause of insanity—The full development of the mental faculties a protection against insanity—Undeveloped mentality—The study of the natural sciences as a means of intellectual and moral training—The reign of law in human evolution— The moral duties consequent on the intellectual recognition of it.

Most persons who have suffered from the malady of thought must at one period or other of their lives have had a feeling that it would not be a hard matter to become insane, that in fact something of an effort was required to preserve their sanity. To those in whose blood a tendency to insanity runs this effort must without doubt be a sustained and severe one, being no less in some instances than a continual struggle to oppose the strong bent of their being. How far then is a man responsible for going mad? This is a question which

has not been much considered; yet it is one well worthy of deep consideration; for it is certain that a man has. or might have, some power over himself to prevent insanity.\* However it be brought about, it is the dethronement of will, the loss of the power of co-ordinating the ideas and feelings; and in the wise development of the control of will over the thoughts and feelings there is a power in ourselves which makes strongly for sanity. From time to time we may see two persons who have had the same faulty heritage, and who, so far as we can judge, have not differed much in the degree of their predisposition to insanity, go very different ways in life—one perhaps to reputation and success, the other to suicide or madness. A great purpose earnestly pursued through life, a purpose to the achievement of which the energies of the individual have been definitely bent, and which has, therefore, involved much renunciation and discipline of self, has perhaps been a saving labour to the one, while the absence of such a life-aim, whether great in itself or great to the individual in the self-discipline which its pursuit entailed, may have left the other without a sufficiently powerful motive to self-government, and so have opened the door to the perturbed streams of thought and feeling which make for madness.

<sup>\*</sup> More than twenty years ago, a small volume, entitled 'Man's Power over Himself to prevent or control Insanity," was published. It contained the substance of two lectures given at the Royal Institution, by the late Reverend John Barlow, and was one of a series of Small Books on Great Subjects. Though excellent of its kind, the author regards the subject entirely from a moral point of view, and certainly in some respects overrates the power of control.

Curious and interesting in this relation is it to observe in what strange and saving outcomes of action a vein of madness in the constitution sometimes displays itself; perhaps in an extreme miserliness, perhaps in the fanatical adoption of extreme religious opinions and practices, not seldom now-a-days in the follies of an imagined intercourse with the spiritual world, sometimes in a morbid vein of poetical delirium, and sometimes in the eager advocacy of extreme social or political theories. These will serve as general illustrations of what I mean, but it will be understood that there are numbers of particular eccentricities having the same meaning which it is impossible to enumerate here. Sad, foolish, or dangerous as such extravagances may seem in some instances, they may be regarded with indulgence as the directions of development which insane tendencies happily take; happily, I may justly say, because, but for them, the result might unhappily be actual insanity. They are a vicarious relief, a sort of masked madness.

When we come to consider the advice which it would be right to give for the guidance of one who was anxious to do that which might protect him from an attack of insanity, the greatness and the difficulty of the subject appears almost overwhelming. There can be no doubt that in the capability of self-formation which each one has in greater or less degree there lies a power over himself to prevent insanity. Not many persons need go mad perhaps—at any rate from moral causes—if they only knew the resources of their nature, and knew how to develope them systematically. A practical experience of

the insane teaches us what a power of self-control even they sometimes evince when they have a sufficient motive to exert it. The fear of suffering by yielding to their insane propensities suffices in many instances to hold them in check; the occasional concealment or actual denial of their delusions, if they have something to fear from the discovery of them, or something to gain by the concealment of them, testifies to a power over themselves which sane persons might sometimes envy. The descriptions of cases of suicidal and homicidal mania which I have given in foregoing chapters show how even desperate insane impulses have been successfully resisted for a time in some instances, and resisted altogether in other instances. It is, indeed, in consequence of the power of self-control which insane persons have, and of the way in which those who have the care of them elicit it, that asylums have become for the most part quiet and orderly institutions, instead of being places of disorder, fury, and violence. The beginning of recovery from mental derangement is always a revival of the power of will; such revival being possible forasmuch as the disease in many of its forms is unattended with organic morbid changes—is functional not organic. If the power then exists in the insane mind in such degree as to prevent the manifestations of madness, and, when aroused to action, to inaugurate recovery from it, is it not reasonable to suppose that it might, had it been properly trained and exercised originally, have sufficed to prevent its occurrence? The pity of it is that the power is often least developed where it is most wanted.

It would be quite useless to inculcate rules for self-formation upon one whose character had taken a certain mould of development; for character is a slow and gradual growth through action in relation to the circumstances of life; it cannot be fashioned suddenly and through reflection only. A man can no more will than he can speak without having learned to do so, nor can he be taught volition any more than he can be taught speech except by practice. It was a pregnant saying, that the history of a man is his character; to which one might add that whosoever would transform a character must undo a life history. The fixed and unchanging laws by which events come to pass hold sway in the domain of mind as in every other domain of nature.

A striking illustration of the difficulty of realising the reign of law in the development of character and in the events of human life is afforded by the criticisms of those who have blamed Goethe because he made Werter commit suicide, instead of making him attain to clearer insight, calmer feeling, and a tranquil life after his sorrows; had they reflected well they must have perceived that suicide was the natural and inevitable termination of the morbid sorrows of such a nature. It was the final explosion of a train of antecedent preparations, an event which was as certain to come as the death of the flower with a canker at its heart. Suicide or madness is the natural end of a morbidly sensitive nature, with a feeble will, unable to contend with the hard experiences of life. You might as well, in truth, preach moderation to the hurricane as talk philosophy to one whose

antecedent life has conducted him to the edge of madness.

I cannot but think that moral philosophers have sometimes exaggerated greatly the direct power of the will, as an abstract entity, over the thoughts and feelings, without at the same time having taken sufficient account of the slow and gradual way in which the concrete will itself must be formed. The culminating effort of mental development, the final blossom of human evolution, it betokens a physiological development as real, though not as apparent, as that which distinguishes the nervous system of man from that of one of the lower animals. Time and systematic exercise are necessary to the gradual organisation of the structure which shall manifest it in full function. No one can resolve successfully by a mere effort of will to think in a certain way, or to feel in a certain way. or even, which is easier, to act always in accordance with certain rules; but he can, by acting upon the circumstances which will in turn act upon him, imperceptibly modify his character: he can thus, by calling external circumstances to his aid, learn to withdraw his mind from one train of thought and feeling, the activity of which will thereupon subside, and can direct it to another train of thought and feeling, which will thereupon become active, and so by constant watchfulness over himself and by habitual exercise of will in the required direction, bring about insensibly the formation of such a habit of thought, feeling and action as he may wish to attain unto. He can make his character grow by degrees to the ideal which he sets before himself.

The development of the power of co-ordinating in complex action various distinct muscles for the accomplishment of a special end is truly the development of the volitional power of such purposive movements; in like manner the development of the power of coordinating ideas and feelings for the achievement of a special life-aim is the development of the volitional power to achieve it. There is a multitude of concrete volitions, but there is no abstract will apart from the particular volitions. Just in fact as an individual gains by practice a particular power over the muscles of his body, associating them in action for the performance of complicated acts, which, without previous training, he could no more perform than he could fly, and rendering his muscles in this regard habitually obedient to the dictates of his will; so can he gain by practice a particular power over the thoughts and feelings of his mind, associating them in action for the accomplishment of a definite purpose in life, and rendering them in this regard habitually obedient to the dictates of the will in the pursuit of its ideal. Striking examples of the gradual development of the power of will over both movements and ideas under most unfavourable conditions are witnessed in our idiot asylums; the records of these establishments showing that there is hardly an idiot so low that he cannot be so far improved by patient and laborious culture as to acquire some power of self-government both in regard to his body and his mind. Great then as the power of will unquestionably is, when rightly developed, we ought not to lose sight of the fact that its development

is effected only by the gradual education of a continued exercise in relation to the circumstances of life.

It will be understood then how it is that when we consider deeply what advice should be given to a person who fears that he may become insane, we too often discover that we have none to give which will be of much real use to him. His character, developed as it has been, will not assimilate advice that is counter to its affinities. We cannot efface the work of years of growth, cannot undo his mental organisation, and it is borne in upon us that advice, if it was to do any good, should have guided the direction of education. The physician soon learns how little effect the best counsels have upon those who, having a tendency to insanity, come to him to ask what they shall do to be saved from the threatened danger: they listen attentively, assent perhaps gratefully, go their ways, and do—exactly as they did before.

But if we were seriously minded to check the increase or lessen the production of insanity, it would be necessary to begin even farther back, and to lay down rules to prevent the propagation of a disease which is one of the most hereditary of diseases. Although it cannot, like small-pox or fever, be communicated from individual to individual, and so be spread through a community, the lunatic being happily in a minority of one in the world, and not commonly infecting other persons with his morbid belief, yet unhappily it is a disease which, having existed in the parent, may entail upon the child a predisposition more or less strong to a like disease. If there is one conviction which a widening experience brings

home to the practical physician, it is a conviction of the large part which hereditary predisposition in some form or other plays in the causation of insanity: it would scarcely be an exaggeration to say that few persons go mad, save from palpable physical causes, who do not show more or less plainly by their gait, manner, gestures, habits of thought, feeling and action, that they have a sort of predestination to madness. The inherited liability may be strong or weak; it may be so weak as hardly to peril sanity amidst the most adverse circumstances of life, or so strong as to issue in an outbreak of madness amidst the most favourable external circumstances. Now it is certain that if we were interested in the breeding of a variety of animals, we should not think of breeding from a stock which was wanting in those qualities that were the highest characteristics of the species: we should not willingly select for breeding purposes a hound that was deficient in scent, or a greyhound that was deficient in speed, or a racehorse that could neither stay well nor gallop fast. Is it right then to sanction propagation of his kind by an individual who is wanting in that which is the highest attribute of man -a sound and stable mental constitution? I note this as a question to be seriously faced and sincerely answered. although not expecting that mankind, in the present state of their development, will either seriously face it or sincerely answer it.

When one considers the reckless way in which persons, whatever the defects of their mental and bodily constitution, often get married, without sense of responsibility

for the miseries which they entail upon those who will be the heirs of their infirmities, without regard, in fact, to anything but their own present gratification, one is driven to think either that man is not the pre-eminently reasoning and moral animal which he claims to be, or that there is in him an instinct which is deeper than knowledge. He has persuaded himself, rightly or wrongly, that in his case there is in the feeling of love between the sexes something of so sacred and mysterious a character as to justify disregard to consequences in marriage. We have only to look at the large part which love fills in novels, poetry and painting, and to consider what a justification of unreason in life it is held to be, to realise what a hold it has on him in his present state of development, and what a repugnance there would be to quench its glow by cold words of reason. At bottom, however, there is nothing particularly holy about it; on the contrary, it is a passion which man shares with other animals; and when its essential nature and function are regarded, we shall nowhere find stronger evidence of a community of nature between man and animals.

It is in this community of nature that we may perceive the explanation of the excitement, rejoicings, personal decoration, and feastings which continue to be the usual accompaniments of marriage, notwithstanding that reason might dictate a more quiet and sober carriage. For it would not be a very absurd thing if an ingenious person, considering curiously what a solemn undertaking marriage is, and what serious

responsibilities it entails, were to maintain that men and women should enter into it soberly and rather sadly, under a grave sense of responsibility, as upon an uncertain voyage, and should reserve their rejoicings for the journey's end, when, having acted well their parts, they might fairly claim a nunc plaudite. But this would be contrary to the way of nature, in which a similar exaltation is displayed when the time of marriage arrives. There is then a transport throughout the vegetable and animal kingdoms, which put forth all the beauty of their colours and all the harmony of their sounds; for the flowers are the dress of love, and the spring melodies of birds are love songs. The temperature of the plant is then increased, and it is arrayed in a floral glory such that "Solomon in all his glory was not arrayed like one of these;" the birds put on a gayer plumage, and their exaltation bursts forth in raptures of varied melody; everywhere the functions reach a transport or ecstasy of love. Man displays his harmony with nature by a similar exaltation.

In face of this instinct it would be a hard and unwelcome thing to lay down rules for the prevention and regulation of marriages in accordance with what might seem to be the sober dictates of reason, even if, which is not the case, science had arrived at such a degree of development as to be able to do so with exactness and authority. Moreover, we are not sure how great may be the compensating advantages of seemingly unwise marriages. It will be easier and more agreeable to admit that for the present men must go on marrying and

giving in marriage without much reflection, and to "trust the universal plan will all protect."

Nevertheless there is a certain amount of definite knowledge which we are bound to recognise, however we may deal with it. It is a fact that a pathological evolution-or, more correctly, a pathological degeneration-of mind does take place through generations. The course of events may be represented as something in this wise: in the first generation we perhaps observe only a predominance of the nervous temperament, irritability, a tendency to cerebral congestion, with passionate and violent outbreaks; in the second generation there is an aggravation of the morbid tendencies, displaying itself in cerebral hæmorrhages, idiopathic affections of the brain, and in the appearance of such neuroses as epilepsy, hysteria and hypochondria; in the third generation, if no check has been opposed to the downward course, we meet with instinctive tendencies of a bad nature, exhibiting themselves in eccentric, disorderly and dangerous acts, and with attacks of some forms of mental derangement; and finally, in the fourth generation, matters going from bad to worse, we meet with deaf-mutism, imbecility and idiocy, and sterility, the terminus of the pathological decline being reached. Such is the course of degeneration when it proceeds unchecked.

But an opposite course of regeneration of the family by happy marriages, wise education, and a prudent conduct of life is possible; the downward tendency may be thus checked, and even perhaps effaced in time. As things are at present, such regeneration is always accidental, is never designed and deliberately aimed at. How it may be done designedly and systematically, is certainly a most complex and difficult enquiry, but it is one which lies within the range of human faculty. first condition of the enquiry is that men should realise that such apparently capricious events as the imbecility of one child and the genius of another child are effects of natural laws, that they are not less so than are the complex chemical combinations and decompositions which at one time were as obscure, and seemed as irregular, uncertain and meaningless, but which are now known to take place with unfailing uniformity under the Let the same amount of patient same conditions. observation and laborious investigation which has been applied by a succession of distinguished men to unravel the mysteries of chemical combinations, be applied to the observation and investigation of the more complex mysteries of the degeneration and regeneration of families, and there can be no doubt that light will be thrown upon the phenomena.

Meanwhile men ought not to repudiate caution because observation is defective, and wilfully to incur needless risks: they will go on falling in love, and, having fallen in love, they will go on marrying, and having married they will go on producing children, but there is no reason why a person having a hereditary predisposition to insanity should fall in love with and marry a person who has a similar predisposition. Falling in love being much a matter of propinquity, they

can keep out of the way of dangerous attraction, or if they have fallen in love they may surely pause before, in order to avoid the temporary suffering of an act of sharp self-renunciation, they resolve to run the almost certain risk of bringing untold miseries upon one or more of the offspring of an ill-advised union.\*

It is an unfortunate circumstance that the tendency often is to an intensification of the neurotic type. In the first place, those who have it are prone, by a sort of elective affinity, to seek in marriage persons who have similar mental qualities, and with whom, therefore, they have a sympathy of tastes, feelings, and thoughts. Emotional susceptibilities, wild flights of imagination, and empty idealistic aspirations, such as they themselves indulge, excite their admiration and sympathy; while common sense, subordination of feeling, sober reflection, and a calm and regulated activity are repugnant to their nature. In the second place, by a similar natural affinity, they select those external circumstances of life the influence of which is adapted to foster rather than to check the special tendencies of their natures. They have not that strength of character and breadth of thought which would enable them to endure and learn to control whatever circumstances they might be placed in, and so to get the benefit of them, however repugnant

<sup>\* &</sup>quot;Insanity is so prevalent in some families that we have known two, three or four children of the same parents suffering under the disorder. In the family of a brother and two sisters there were ten cases of insanity—five in one family, two in another, and three in a third—out of twenty members."—Partial Derangement of the Mind, by John Cheyne, M.D.

they might be, in self-culture; but eagerly seek such as are grateful to them, and so intensify their peculiar tendencies, until these perhaps undergo a pathological development. In the third place, they apply to their children the same mismanagement which they apply to themselves. These are twice cursed: they are cursed in the inheritance of a bad descent, and in the training which they get, or rather the want of training from which they suffer, in consequence of parental peculiarities and defects. Here, then, are three important causes of an aggravation of a neurotic type which it does not lie beyond the wisdom and power of mankind greatly to obviate.\*

\* It is impossible to place any reliance upon the information afforded by statistics concerning the influence of hereditary predisposition in the causation of insanity; the difficulty of getting at the truth on this matter being such as to render them quite untrustworthy. To base a conclusion on available statistics would be to vastly underrate its influence as a cause; whereas it is hardly possible, I believe, to overrate its actual importance. I am unwilling, for obvious reasons, to bring forward illustrations from my own experience; but in order to convey an idea of the character and extent of its probable operation, I may quote from a recently published paper the three following cases, which illustrate also the natural termination of degeneration going on through generations:—

A man, A. B., of congenital weak mind, had six children, three of whom died during childhood; the other three, one male and two females, were imbecile, and were sent to an asylum at the respective ages of forty, forty-two, and forty-four. The male had previously married, but had no children. The females having had no issue, the family happily becomes

extinct with the present generation.

A man, C. D., labouring under dementia, whose first wife died insane, had by her a large family, four of whom, two sons and two daughters, inherited mental unsoundness. The two daughters have not had children. One of the sons is unmarried; the other is married and has had four children, all of whom died in childhood. But C. D. has had by a second wife, who is also insane, six children. Of these five died young, and the survivor is mentally defective.

If we refer to the enumerated causes of insanity in any book which treats of the subject, or in the first asylum report which comes to hand, we shall find that hereditary predisposition, intemperance, and mental anxieties and troubles of some kind or other cover nearly the whole field of causation. These are causes which it should be the work of mankind to remove, or, if not to remove entirely, at any rate to abate considerably: hereditary predisposition, by abstention from marriage or by prudent intermarriage; intemperance, by temperance in living; mental anxieties, by the wise cultivation of the mind and by the formation of habits of self-government. Avoiding intemperance and other excesses, we shall cut off not only the insanity which is directly produced by it, but we shall prevent its indirect effects by cutting off a fruitful cause of hereditary predisposition to physical and mental degeneracy in the next generation; and by cutting off such native infirmities of brain and mind, we shall prevent the emotional agitations and explosions which are the consequences of such infirmities and which act as the so-called moral causes of the disease.

While we must admit hereditary influence to be the most powerful factor in the causation of insanity, there can be no doubt that intemperance stands next to it in

A man, E. F., while insanc, committed suicide. His mother was insanc, and her sister died in an asylum. His grandmother was insane, and his grandfather was a drunkard. His father is described as "eccentrie;" his uncle was extremely morbid, and had a drunken son, who committed suicide. The other members of this family are, so far as can be ascertained, unmarried and without offspring .- "The means of cheeking the growth of Insanity in the Population." By G. J. Hearden, M.D. British Medical Journal, July 19, 1873.

the list of efficient causes: it acts not only as a frequent exciting cause where there is hereditary predisposition, but as an originating cause of cerebral and mental degeneracy, as a producer of the disease de novo. If all hereditary causes of insanity were cut off, and if the disease were thus stamped out for a time, it would assuredly soon be created anew by intemperance and other excesses. A striking example of the effects of intemperance in producing insanity has recently been furnished by the experience of the Glamorgan County Asylum. During the second half of the year 1871, the admissions of male patients were only 24, whereas they were 47 and 73 in the preceding and succeeding half years. During the first quarter of the year 1873, they were 10, whereas they were 21 and 18 in the preceding and succeeding There was no corresponding difference as regards female admissions. There was, however, a similar experience at the County prison, the production of crime as well as of insanity having diminished in a striking manner. Now the interest and instruction of these facts lie in this—that the exceptional periods corresponded exactly with the last two "strikes" in the coal and iron industries, in which Glamorganshire is extensively engaged. The decrease was undoubtedly due mainly to the fact that the labourers had no money to spend in drinking and in debauchery, that they were sober and temperate by compulsion, the direct result of which was that there was a marked decrease in the production of insanity and of crime.\*

<sup>\* &</sup>quot;Insanity and Intemperance." By D. Yellowlees, M.D., British Medical Journal, October 4th, 1873.

If men took careful thought of the best use which they could make of their bodies, they would probably never take alcohol except as they would take a dose of medicine. in order to serve some special purpose. It is idle to say that there is any real necessity for persons who are in good health to indulge in any kind of alcoholic liquor. At the best it is an indulgence which is unnecessary; at the worst, it is a vice which occasions infinite misery, sin. crime, madness, and disease. Short of the patent and undeniable ills which it is admitted on all hands to produce, it is at the bottom of manifold mischiefs that are never brought directly home to it. How much ill work would not be done, how much good work would be better done, but for its baneful inspiration! Each act of crime, each suicide, each outbreak of madness, each disease, occasioned by it, means an infinite amount of suffering endured and inflicted before matters have reached that climax.

It may of course be said that a moderate consumption of alcoholic liquors can do no harm, must on the contrary do good, when exhausted nature feels the need of some stimulant. I am not prepared to say that it does any demonstrable harm, but at the same time it is not wise to have recourse to an alcoholic stimulant when recourse ought to be had to food or rest; and it is a serious harm to the mind to gain, as is sometimes done, by the factitious aid of a stimulant, the energy which should come from the calm resolution of a developed will. What one sees happen often enough in life is this: there are persons of anxious and sus-

ceptible temperament who, having to meet some strain in their work, or some trial in their lives, are prone to take a stimulant in order to give themselves the necessary nerve; they fly to an artificial aid, which fails not in time to exact the penalty for the temporary help which it yields, instead of deliberately exerting their will and gaining thereby the advantage which such an exertion would give them on another occasion. Like the pawnbroker or the usurer, it is a present help at the cost of a frightful interest; and if the habit of recurring to it be formed, the end must be a bankruptcy of health. It is not possible to escape the penalties of weakening the will: sooner or later they are exacted in one way or another to the uttermost farthing: it is not possible, on the other hand, to overrate the advantages of strengthening the will by a wise exercise; the fruits of such culture are an unfailing help in time of need.

There are at least five distinct varieties of mental derangement which own alcoholic intemperance as their direct and efficient cause. Nor do other kinds of intemperance fail to play their part in the causation of mental disorders. Were men with one consent to give up alcohol and other excesses—were they to live temperately, soberly, and chastely, or what is fundamentally the same thing, holily, that is healthily—there can be no doubt that there would soon be a vast diminution in the amount of insanity in the world. It would be lessened in this generation, but still more so in the next generation; a part of which, as matters stand, will be begotten and bred under the pernicious auspices of parental

excesses, and the infirmities and diseases engendered by them. But it is quite certain that men will not abandon their excesses in this day or generation; that they will not adopt self-denying ordinances; that they will not be at the pains to cherish their bodies, so as to develop their powers to the best advantage, and to make them the ready servants of an enlightened and well developed will. They will go on as before, producing insanity from lack of self-denial; and when admonished of the steep and arduous path which they should follow, will go away, like one of old, sorrowful, because they have many passions.

It is to the perfecting of mankind by the thorough application of a true system of education that we must look for the development of the knowledge and the power of self-restraint which shall enable them, not only to protect themselves from much insanity in one generation. but to check the propagation of it from generation to generation. It is not probable that much progress can be made in one generation; for centuries are but seconds in the great process of human evolution; none the less is it a duty to do all we can to carry it forward, in the confident hope that the day will dawn although it is yet only the twelfth hour of the night. Unhappily we are not vet agreed as to what should be the true aim and character of education. Regarding the subject from a scientific point of view, the best education would seem to be that which was directed to teach man to understand himself. and to understand the nature which surrounds him, and of which he is a part and a product; so to enable him, as

its conscious minister and interpreter, to bring himself into harmony with nature in his thoughts and actions; and so to promote the progressing evolution of nature through him, its conscious self. The highest evolution of which man's being is capable, physically, morally and intellectually, through knowledge of, and obedience to, those natural laws which govern not only the physical world, but, not less surely, every thought and feeling which it enters into his mind to conceive-must be the aim of an education founded on a truly scientific psychology. But if this be the true aim of education, how vast a revolution remains to be accomplished! How many things are men yet taught which they ought not to be taught, and how many things are they not taught which they ought to be taught! To lay down the principles of mental hygiene on a scientific basis would, alas, be to offend many cherished beliefs, and to go counter to the convictions of all but a small minority of mankind. Nevertheless, I believe that the aims of a true education would, if sincerely recognised and earnestly pursued, do more than all the maxims of philosophy have done, and all the arts of medicine can do, to lessen the amount of insanity on earth.

It will be admitted that as regards a knowledge of the laws of his own nature and of their relations to the laws of external nature, man is yet in a position of ignorance very like that in which the savages of old were, or the savages of to-day are, in regard to a knowledge of the laws of physical nature. Like them, he feels their effects without understanding their nature; like them, he

cherishes superstitious belief instead of systematically setting to work to enlighten his understanding; like them, he puts up prayers where he should exert an intelligent will; like them, he suffers from the stern and inexorable dominion of laws which he has not been taught to understand, and which he does not even recognise when he suffers by them. No one can of course fail to testify, consciously or unconsciously, to the workings of natural laws in his being; he witnesses to them, though he cannot trace them, in his thoughts, feelings and actions, and thus inevitably acquires crude empirical rules to guide him; but the misfortune is that he is apt thereupon to assign an immediate supernatural agency, and to prostrate himself in helpless fear when he ought to proceed reverently to enquire and then intelligently to obey. Is there any fundamental difference between the savage coming to destruction through ignorance of the law of gravitation and the civilised European coming to madness through ignorance of the laws of his own nature, and of the laws of the nature of things and men around him? Insanity is simply a discord in the universe—the result and evidence of a want of harmony between an individual human nature and the nature surrounding it, and of which it is a part. The marvel is perhaps that there are not more insane persons than there are, considering how blindly men are yet compelled to live in very complex relations, how much they depend upon the crude instincts of empiricism, how little they have yet systematically done to know nature in themselves and themselves in nature.

Let us not deceive ourselves with vain imaginations. The life of an individual in this age of civilisation is assuredly not a life in which the best use is made of his physical, moral, and intellectual capacities. When we search into the causes of disease, how many diseases are directly or indirectly traceable to breaches of those laws which govern the development and the health of the body! I have already laid stress upon the disastrous effects of intemperance, and what I have said must suffice now as an illustration of disease caused by ignorance or disdain of the laws of health. But when we pass from the consideration of the management of the body to the consideration of that of mind, we shall discover as little evidence of a sincere desire and resolution to bring the feelings and thoughts into harmony with nature, and to develop the powers of the mind to the utmost. There is hardly any one who sets self-development before himself as an aim in life. The aims which chiefly predominate—riches, position, power, applause of men, are such as inevitably breed and foster many bad passions in the eager competition to attain them. Hence, in fact, come disappointed ambition, jealousy, grief from loss of fortune, all the torments of wounded self-love, and a thousand other mental sufferings—the commonly enumerated moral causes of insanity. They are griefs of a kind to which a rightly-developed nature should not fall a prey. There need be no disappointed ambition, if a man were to set before himself a true aim in life, and to work definitely for it; no envy nor jealousy, if he considered that it mattered not whether he did a great thing or some

one else did it, nature's only concern being that it should be done; no grief from loss of fortune, if he estimated at its true value that which fortune can bring him and that which fortune can never bring him; no wounded self-love, if he had learned well the eternal lesson of life -self-renunciation.

But men exhibit a marvellous facility of deceiving themselves; while professing to esteem those worldly aims as of little account, as infinitely trivial in comparison with the momentous concerns of the life to come, they at the same time concentrate all the real hopes, aspirations, and energies of their lives upon the pursuit of them. Thus their nature is an inconsistency; it is a house divided against itself, and how can it stand when trouble comes? How can a nature be strong which is at war with itself, whose faith and works are in discord? A decrease in the amount of insanity in the world would probably take place in a generation or two, if men were to cease to deceive themselves, and were to make their natures strong by making a real harmony of them-if they would learn to be sincere to themselves in examining rigorously the foundations of their beliefs, and in estimating the quality of the aims which they actually pursue, and of the means by which they pursue them.

There is a practice, highly esteemed in England, of carefully preserving certain animals called foxes, in order that they may be hunted to death for the amusement of men and women who follow the chase on horseback with extraordinary ardour and enthusiasm. It is deemed an honour to be present at the death, when the exhausted beast is torn to pieces by the dogs, he or she who is the first to attain that enviable position receiving as a trophy a share with the dogs in the fragments of its body-the tail. Artists are so full of admiration of the different scenes of the chase, that they employ their talents in painting them, and the pictures are purchased by lovers of the sport, in order to adorn the walls of their houses. Thus art lends its elevating influence to glorify the so-called manly sport, which, savage as it might seem, excites no horror in the most gentle breast. And yet, while this is so, there is in England an active society for the prevention of cruelty to animals, which takes no step to prevent this systematic preservation of animals for the systematic infliction of suffering and death upon them as a sport, and which is even sincerely supported by foxhunters. Moreover, those who enthusiastically follow the cruel chase are followers also of the meek and lowly Nazarene. And they are unconscious of an inconsistency in themselves! If man's facility of self-deception were not incalculable, one knows not how he could dare face the judgment on his life, which he professes to expect after death, when the deliberate and systematic infliction of suffering has been his pleasure; not as an end, certainly, still as a means to an unworthy end, Boasting himself over the beasts that perish, he is probably the only animal which inflicts suffering and death as a mere amusement for itself.

I have not brought forward this illustration in order to

speculate upon the possible influence of the pursuit of a cruel sport upon the character, but as one among other inconsistencies which might be adduced in order to point out the impossibility of real sincerity of thought while there is such flagrant self-deception. This is indeed the evil of it. Unconscious self-deception it may be, but it is not less hurtful, nay, it is perhaps an indication of more hurt to character, on that account. No one can live in inconsistent habits of thought, feeling, and action, without injury to the sincerity and wholeness of his nature, and to the clearness and strength of his understanding. While he fails to see in its true light such a cruel practice as the infliction of torture and of death for the purposes of his amusement, it is impossible that he can see other things in their true light. The best guarantee of clear apprehension, right feeling, vigorous understanding, and intelligent will, in any relation of life, lies in the formation of a habit of sound apprehension, right feeling, vigorous understanding, and intelligent will in former relations—in other words, in the sincere and thorough development of the intellectual and moral nature. The stronger and more complete this development is, the better will the individual be fortified against the inroads of any kind of mental degeneracy.

There are many similar inconsistencies of thought and character which might, were this the place for it, be brought forward to show how far men yet are from doing justice to their mental faculties by developing them consistently to the utmost of their capacities. In order to do that successfully it will be necessary to set before themselves a worthy aim in life, and to work definitely for it. The question to be entertained and decided at the outset will be, whether this aim shall be internal or external—whether the individual shall seek first the completest development of which his nature is capable, other gains, such as riches, reputation, power, being allowed to fall to him by the way: or whether he shall seek worldly success, the formation of character being allowed to be a secondary and incidental matter? It is a vital question, the practical answer to which must influence most materially the training and cultivation of the mind. As a matter of fact it admits of no doubt that self-development is not made a life-aim; that such formation of character as takes place does, in the great majority of men, take place, as it were, by chance, without premeditation, as an incidental effect of the discipline and training which they undergo in the pursuit of other life-aims. Is it any marvel, then, that the theoretical recognition of a higher aim in life which they make once a week as a conventional duty has no real informing influence in the formation of character; that it is a doctrine which, by an easy self-deception, is held on the condition of its being a sort of sleeping partner, and taking no active part in the management of affairs? No argument is needed to prove that it must be hurtful to the intellectual and moral nature to hold a belief on such terms.

Without doubt the practical aims of life, and the labour and self-denial necessary to the achievement of

them, do entail a large amount of self-discipline of a more or less useful kind. But it is not less certain that the full development of the resources of the mental nature can be achieved only by a deliberate culture and sustained activity of the mind as an aim in itself. A man may conduct successfully an important business or profession, once he has acquired the knowledge of it, without much real mental activity—almost automatically, indeed. By accustoming himself to attend habitually to a certain class of ideas, he is able to attend to them quite easily, to compare them almost unconsciously, and to carry out instinctively, as it were, the conduct which they dictate; his knowledge and action become a sort of acquired instinct—the automatic work of nerve-centres that have been trained thereto, as nervecentres are trained to perform easily the laboriously acquired function of walking. He observes, judges, and acts with as little conscious effort of attention as he uses for talking or walking, or as a skilful accountant uses in casting up a column of figures. It is true that the original labour of acquisition has cost him an expenditure of considerable mental activity; but once the faculty has been acquired, it demands little attention, and, if exercised within reasonable limits, occasions little fatigue.

Plainly, then, an important business may be carried on without calling into action the higher faculties of the mind, by which the knowledge of it was in the first instance acquired; and it is no exaggeration to say that a great many persons never exercise any real mental activity, never undergo any real development, after they have become skilled in the special work of their lives. Their thoughts run in a groove so well worn that the difficulty is to get out of it. The higher faculties being unused undergo decay, if not degeneration; real mental application becomes first difficult and then impossible; and when a calamity occurs they are without internal resources to enable them to bear up against its strain. When they are taken from the routine of their labours they have no interests, they can turn to no intellectual work, are a torment to themselves and to others, as they go through the tedious process of a decay of mind. The matter is worse when a person has made success in business the one aim of his life, when he has by long concentration of desire and energy upon such an aim so completely grown to it as to have made it the main part of his inner life—that to which all his thoughts, feelings, and actions are directed; then if some error of his own, or some misfortune beyond his control, shatters his hopes, destroys the pride of his previous accomplishments, lays low the fabric which he has been building with all the eagerness and energy of an intense egoism, he is left naked and defenceless against his afflictions, sinks into melancholy, and from melancholy into madness. To neglect the continued culture and exercise of the intellectual and moral faculties is to leave the mind at the mercy of external circumstances: with it as with the body, to cease to strive is to begin to die.

If the foregoing remarks be true, it is obvious that

when any one becomes insane who has been actively engaged in the conduct of a large business, the fact cannot justly be accounted evidence of the powerlessness of mental activity to prevent insanity. His pursuit has failed completely to satisfy the requirements of a proper mental culture. It is the same with another great interest of life, which, were it as real as it is reputed to be, should exert a most powerful influence upon the development of the mental nature-namely, religion. The majority of men discharge its duties automatically, and accept its doctrines formally, paying to these a liphomage, without ever having a distinct grasp of them, or ever pursuing them in thought to their logical consequences; they believe vaguely, without ever caring to realise distinctly what it is that they think they believe; are content with a kind of belief which they would certainly at once repudiate in their worldly affairs. It needs no argument to prove that such a slovenly habit of thought is not only not conducive to, but is greatly hurtful to. mental culture, and that any mind which is content to hold beliefs on those terms is ill fortified by the development of its powers to exercise sound reflection on other subjects, or to react vigorously to the end under the burdens laid upon it.

Furthermore, while the lessons of religion inculcate the duty of subduing those passions which have their roots in a strong self-feeling, they do not, in the way they are too often taught, enforce that completer selfrenunciation which consists in the conviction of personal insignificance, and in the suppression of egoism, even if it be the egoism of excessive sensibility and of a too tender conscience. There can be no doubt that harm is sometimes done to persons of a susceptible mind by encouraging or stimulating them to reflect upon their feelings, instead of inciting them to put the energy of their feelings into a well-ordered mental activity. There is but one true cure for suffering, and that is action; and a healthy mind, like a healthy body, should lose the consciousness of self in the energy of action. By self-introspection and self-analysis, especially when these are inculcated as a religious duty upon persons who, from bodily or other causes, are inclined to excessive susceptibilities, a morbid egoism is fostered, which is sometimes mistaken for an awakened conscience

But a tender conscience of that kind, overrating its own importance, may easily pass into insanity, unless counterbalanced by the sobering influence of active outward occupations and interests. It cannot but go ill with any one when he becomes the centre round which his thoughts, feelings, and actions move habitually; and it is certainly a mistake in the culture of mind to develop the emotional part at the expense of the intellect and will. In the religious life, as in the worldly life, the feelings must be kept in due subordination, otherwise it will be in vain to pray to be granted "in health, wealth, and wisdom long to live." For prayer will not compensate for lack of knowledge and lack of will in the government of the mind and in the conduct of life; and to inculcate or foster a habit of

supplication which is merely a formal or sentimental invocation of help from on high, instead of enforcing the duty of enlightening the understanding and strengthening the will, is to go methodically to work to undermine the intellect and the will.

"I call man's inability to moderate and control the affective or emotional element in his nature Slavery." says Spinoza. "For man under the dominion of his affections is not master of himself, but is controlled by fate, as it were, so that in seeing and even approving the better course, he nevertheless feels himself constrained to follow the worse." Without doubt, if man could thus attain to freedom by moderating and controlling the affective or emotional element in his nature, he would vastly lessen the sum of insanity upon earth; for he would get rid at one stroke of the so-called moral causes of the disease. Men seldom, if ever, go mad from great intellectual activity, if it be unaccompanied by emotional agitation; it is when the feelings are deeply engaged that the stability of the mind is most endangered; and when persons are said to have gone insane, or to have committed suicide, from mental overwork, the truth in nine cases out of ten, if not in all cases, is that anxieties and apprehensions, disappointed ambition, envies and jealousies, the wounds of an exaggerated self-love, or similar heartaches, have been the real causes of their breakdown; and these are causes which all have their footing in an undue self-feeling. Depressing passions, with the congenial thoughts which they call up and keep active in the mind, involve a large expenditure of

nerve-force, and if the mind has not gained, by cultivation, an internal power of withdrawing the attention from them and of fixing it on other and more healthy trains of thought, or if favourable external circumstances do not counteract them, aiding the individual to do what he cannot do for himself, there can be in the end but one result—insolvency. Slight excesses of expenditure over income, in vital as in financial matters, must be charged to the capital account, and though each excess may be by itself slight, they are cumulative, and inevitably tell their tale at last.

The formation of a character in which the thoughts, feelings, and actions are under the habitual guidance of a well fashioned will, is perhaps the hardest task in the world, being, when accomplished, the highest effort of self-development. It represents the attainment by conscious method of a harmony of the individual nature in itself, and of the completest harmony between man and nature: a condition in which the individual has succeeded in making the best of himself, of the human nature with which he has to do, and of the world in which he moves and has his being. And assuredly the pursuit of this self-culture through life may be presented to mankind as an aim the attainment of which. rendering them superior to circumstances, will protect them from the injurious operation of those painful emotions which often make shipwreck of the mental health. There is a way, then, hard and long and weary though it be, of counteracting the third of those powerful causes which I have previously declared to be by much the most influential in the production of insanity.

I am unwilling to conclude these desultory reflections, and to bring this chapter of hints rather than of exposition to an end, without pointing out that the ordinary education of the day systematically leaves undeveloped a vast amount of mentality in the race. It would seem indispensable to a right training of the mind of every child that it should be instructed in the knowledge of the nature of the world in which it has been placed, and of which it is a part. The relations of the earth in the planetary system, the changes which have taken place on its surface through the ages, the elements of which it is formed, and the laws of their combinations and decompositions, the nature and function of the vegetable and animal life on its surface, the constitution of the human body and mind, and the relations of body and mind to their environment, are subjects on which a vast amount of knowledge has been formulated in the various natural It is strange, when we think of it, that any education which leaves a man ignorant of these things should be deemed an education at all; marvellous that intelligent men should be content to go through their lives knowing little more of them than the savages.

Apart, however, from the positive duty of man to get the clearest understanding possible of his relations with his surroundings, in order to make the best of them for the promotion of his own development, the study and pursuit of the natural sciences furnish a most valuable training of the intellectual faculties, through

the steps of observation, generalisation, abstraction, inductive and deductive reasoning. No other studies are so well fitted to teach him to observe accurately and to reason correctly; for in the sciences truth is earnestly pursued for its own sake, without regard to whether it may seem useful or not, and without regard to preconceived opinion, or to the claims of authority of any kind; and in them a conclusion is not accepted as true until it has been subjected to every possible verification. What is truth if it be not the adequate expression in human thought of sincere relations between man and nature, undergoing modification and increasing in complexity as these relations daily become more true, special, and complex in the successive developments of the different sciences? In these developments, and in the arts founded upon them, nature is undergoing its latest evolution through man, its last and highest product. How then can any one be properly trained to make the best of his powers and to discharge fitly his functions in the world, how can he be educated in the true sense of the word, if he be left without knowledge of natural science?

It will not be denied that there are a great many persons who are quite incapable of sustained attention, accurate observation, and sound reasoning. They are unable to apprehend a question distinctly, and to fix their attention to it; use words without attaching a definite meaning to them; cherish beliefs without realising the true nature of what they affirm; wander in an incoherent way from subjects which they attempt to discuss; believe

as their fears, affections, or interests prompt; and mistake prejudices or vague feelings for well-founded convictions. Now these are intellectual faults which a man cannot be guilty of in gaining a proper knowledge of the physical sciences. In such labour he must concentrate his attention, must apprehend clearly the definite meanings of words, must submit his understanding to the facts with humility and perseverance, must patiently follow the successive steps by which the results have been acquired: he can only know in so far as he himself is the humble minister and honest interpreter of nature, or follows in the footsteps of those who, having been successful ministers and interpreters of nature, have unfolded the various sciences. In proportion as he deviates, in the study of any science, from this right method, will his knowledge be defective or erroneous. This being so, it would seem obvious that nothing can be better adapted than such a study to strengthen and develop his intellectual faculties; for it is not merely the knowledge of a particular science which he gains, but he gains a useful habit of mind—a habit of close observation and accurate reasoning, which will serve him well in every other in-He gains not only the power of an increased knowledge, but an increased power of gaining knowledge: his intellectual development is along the path of nature's evolution. The more truthfully his thoughts reflect nature in one of her domains, the more easily will other domains of nature be reflected in his mind; for one science thoroughly learnt contains implicitly, quoad the intellectual processes concerned in its attainment, all

sciences. His trained understanding makes him the potential master of them all.

Nor is the moral nature uninfluenced beneficially by the pursuit of science. It is a labour in which there is but one way of succeeding, and that is through obedience. To penetrate the secrets of nature and to become master of her laws, patience, humility, and veracity are essential qualities. And by veracity in this relation is meant not only the sincere expression of opinion, once formed, but sincerity also in the apprehension of truth—a perfect freedom from bias and an entire sincerity of nature in forming and weighing opinions, as well as in uttering them. It may be said, no doubt, that the formation of a character implies more than an increase of knowledge by the inductive method, or an increase of the intellectual power which increased knowledge imparts. That is not a matter for discussion now: it is enough for the present purpose to point out that education by the scientific method does demand and therefore strengthen certain qualities of the moral nature. And one may take leave to think that. whatever may be the power which best promotes moral development, it can be nothing but an advantage to an individual to have such a knowledge of the reign of moral law in the domain of human evolution as an inductive method of study will impart to his understanding.

It would simplify discussions on education if the truth were distinctly apprehended that morality is not dependent for its existence upon religion, and that men are not dependent only upon revelation for their knowledge of it. Let them realise that nature works through moral laws, as clearly as they realise her operation through physical laws, and they will have as strong a sense or feeling of the folly of disobeying the former as they now have of the folly of disobeying the latter. The result must be that morality will obtain as strong a sanction from an inductive method of study as it now has, and has happily long had, from authority, and that an increased knowledge will confer an increased feeling of duty and an increased power to perform it.

It is difficult to realise the reign of law in our relations with human nature; for we are unable to look at the matter calmly and objectively as we can in our investigations of physical nature; our sympathies and antipathies as beings of the same kind are necessarily stirred; and we unavoidably mingle our feelings with our apprehensions and conceptions. There will always be therefore a feeling of approbation of right and of disapprobation of wrong action superadded to the intellectual recognition of moral law, such as does not accompany a like obedience to or infraction of physical laws. Thus the ethical element, the imperative mandate, is added to the utilitarian basis.

But utilitarianism is an unfortunate word, which, notwithstanding elaborate explanations of what is really meant by it, will continue to give undeservedly an ill odour to the theory of morals based upon it. We may justly say undeservedly, because it is certain that morality is a condition of the progress of evolution in the domain of human nature, and that it is therefore in

the highest sense utilitarian, as promoting in the long-run the welfare of mankind and of the individuals who constitute mankind. The opponents of utilitarianism will never be persuaded, however, that it does not mean selfishness—that the theory of it is not to place happiness to the individual as an immediate end. But the happiness of the race, the exaltation of humanity, is its real end, in ministering to which a right-minded person is to find inward satisfaction, even though the way be through self-denial and suffering; if this be selfishness it is so only in so far as it is selfish for mankind to desire and strive to progress in evolution. The good effects of observance of, and the evil consequences of infraction of, moral law are often remote. That all sin is avenged upon earth is true, but it is not true that a man cannot escape the consequences of his ill-doing; it would be more true to say that mankind cannot escape the consequences of a man's ill-doing.

In like manner, so far as immediate results are concerned, obedience to moral law, or well-doing, is often a sacrifice to duty—a self-sacrifice, such as a parent makes for his child and finds his happiness in making; its ministration to the eventual happiness of mankind, much less of the individual, may not be apparent. But the generalisation from experience having been more or less consciously made, and having by accumulation and transmission of effects through generations been fixed in the nature as a moral sense or instinct—acquisition having become endowment here as in other departments of organic development—it is obeyed as a duty

by a well-born person, without an intellectual apprehension of its whole operation, and even in scorn of the immediate painful consequences of such obedience.\* It is formed as instincts are formed in animals, and then obeyed, as they are obeyed, almost blindly; obedience bringing inward satisfaction, notwithstanding that it may bring external privation and suffering. The development of the mental organisation being part of the order of nature, and taking place in accordance with the laws of the nature which surrounds it and of which it is part and product, the moral law in man is the conscious reflection of the moral law in the universe—a result among other results of nature having become selfconscious in man. And the building up of

Des impressions particulières, mais constantes et toujours les mêmes, sont done capable de modifier les dispositions organiques et de rendre leurs modifications fixes dans les races. . . . Et si les causes déterminantes de l'habitude première ne discontinuent point d'agir pendant la durée de plusieurs générations successives, il se forme une nouvelle nature acquise, laquelle ne peut, à son tour, être changée, qu'autaut que ces mêmes causes cessent d'agir pendant longtemps, et surtout que des causes différentes viennent d'imprimer à l'économie animale une autre suite de déterminations.—'Rapports du Physique et du Moral de l'Homme.'—P. J. G. Cabanis.

The fact that where foxes are much persecuted the young ones show themselves much more cunning and distrustful from the first than old foxes in places where they are not persecuted, was thought by one learned author an absolute demonstration that animals had language; but F. Cuvier explained it by the hereditary transmission of acquired instincts. For other examples of the transmission of acquired faculties see the elaborate Traité Philosophique et Physiologique de l'Hérédité Naturelle, by Dr. Prosper Lucas, 1847. But these scattered observations have now found their place, and have been supplemented by many others, in Mr. Darwin's exposition of his great law of evolution.

a moral science by the application of the inductive method to the study of moral phenomena, so far from weakening the authority of conscience, cannot fail to strengthen the feeling of duty to do the right and eschew the wrong, by showing plainly how, through the unfailing operation of natural law, the former surely brings good and the latter evil upon mankind.

That it should be necessary to enter into arguments to prove the moral nature of men to be a proper subject of scientific study, and to set forth the beneficial effect which such a study must have upon the understanding and the moral nature, will probably be thought as extraordinary a thing in the years to come as it seems extraordinary to us now that persons should have had to set forth elaborate reasons in times past to disprove the existence of witchcraft. Meanwhile, it is plain that in neglecting a most promising means of mental training, and in thus failing to develop to the utmost all the resources of their mental nature, men do not do all that they might do to protect themselves from the inroads of mental derangement. It is, indeed, to the development of the vast amount of undeveloped mentality which there assuredly is among mankind that we may look with confident hope for the diminution in time to come of the sum of insanity upon earth.

## INDEX.

Acosta, Josephus, on possession by the devil. 35 Age, the mental decay of old, 259-Alcohol, the abuse of, 285 Anthony, St., 10 Aphasia, 264; condition of understanding in, 265; Trousseau on, 265; Dr. W. Ogle, on a case of, 266 Arnold, trial of, 90 Asclepiades, on the treatment of insanity, 8 Astrology, the speculations of, 20 Asylum, lunatic, popular notion of, 1; Mr. Burke's visit to, 2 Aura epileptica, 165, 236 Banks v. Goodfellow, case of, 115 Barlow, Reverend John, on the prevention of insanity, 269 Bartlett, Judge, on testamentary capacity, 115 Bell, Chief Justice, on the criterion of responsibility, 103 Bellingham, trial of, 92 Billman, case of, 204 Bisgrove, case of, 167 Boardman v. Woodman, case of, 104, 108, 111, 115 Body, the theological contempt of, 12; sympathy of organs of, 17 Brain, function of, 15; disorder of, 15; organic sympathies of, 17; education of, 19; pathological study of, 154 Browne, Sir Thomas, on hereditary

influence, 23

Burke, Mr., his visit to a lunatic asylum, 2 Burton, case of, 157

CABANIS, P. J. G., on the transmission of acquired faculties, 307. Casaubon, Meric, on sin, 26; on madness, 35; on the persistence of dream-hallucinations, 251 Capacity, testamentary, 111–120 Cartwright v. Cartwright, case of, Character, formation of, 272, 294, Cheyne, Dr. John, on the prevalence of insanity, 281 Chorea, kinship of, to insanity, 42, Classification of insanity, 66-85 Clissold, Rev. Augustus, on the prophetic spirit, 50 Cockburn, Chief Justice, on testamentary capacity, 115 Code, French penal, 108; German

Code, French penal, 108; German penal, 109 Coke, Sir E., on the execution of madmen, 128 Coppelly, Dr., on the duty of the

Conolly, Dr., on the duty of the medical witness, 86; on suicidal insanity, 139; on homicidal impulse, 147

Consciousness, physical modifications of, 16

Crime, viewed as insanity, 26; hereditary nature of, 29; in imbecility, 68 Criminals, 25-33; the treatment of, 27; the production of, 28; defective organisation of, 30

Cuvier, F., on acquired instincts, 307

DELASIAUVE, on undetected epilepsy.

Delusions, as the test of insanity, 91, 113, 114; concealment of, 192, 214; of persecution, 190, 196; futility of argument against, 200; as causes of homicide, 208, 252; influence upon conduct, 216

Dementia, 72; epileptic, 242; senile, 254-264; moral, 242, 261

Demoniacal possession, 10 Dew v. Clarke, case of, 113

Dipsomania, 43, 83

Doe, Judge, on tests of responsibility, 107, 111

Dreaming, insanity and, 150; persistence of hallucinations of, 251.

ECCENTRICITY, 55, 270

Echeverria, Dr., on epileptic insanity, 235; an epileptic unconsciousness, 238

Education, power and limits of, 20: criminal, 29; the true aim of,

Emotions, as cause of insanity, 290, 299; undue development of, 298

Epilepsy, in criminals, 32; kinship to insanity, 41; the neurosis of, 156, 165; masked, 166, 230; mental prodromata of, 235; peculiar state of consciousness in, 237; symptoms of mania of, 239-242; undetected, 243

Epileptics, religious sentiment in, 243; visions of, 243; imagination of. 243

Erskine, Mr., on delusion as the test of insanity, 91, 114

Esquirol, on insanity without delusion, 142, 147; on moral insanity, 175; on the recurrence of homicidal mania, 206; on the concealment of delusions, 214; on homicidal mania after epilepsy, 235

Ettmuller, on insanity without delusion, 140

FALRET, Jules, on homicidal impulse after epilepsy, 233; on the symptoms of epilepsy, 235

Family, degeneration and regeneration of, 279

Feelings, relation of, to belief, 152; insane, 194, 246; the control of, 299

Folie circulaire, 176-178

Foville, Dr., on the condition of mind in monomania, 221

Foxhunting, 291

GRIESINGER, on the sudden outbreak of insanity, 155

HADFIELD, trial of, 91

Hale, Lord, on partial and total insanity, 89; on witches, 106

Hearden, Dr. J. G., on hereditary predisposition to insanity, 282

Hereditary influence, 21-23; Solomon on, 22; Jewish recognition of, 22; Sir Thomas Browne on, 23; in the causation of insanity, 282; Dr. Prosper Lucas on, 307

Hippocrates, on insanity, 7; on vice,

Hoffbauer, his criterion of responsibility, 209; criticism of, 210

Homicide, in simple melancholia, 123, 131, 187; premeditation in, 293; epileptic, 229, 245; during sleep, 251; after dreams, 252; conduct after, 208

Homicidal impulse, irresistible or unresisted, 164, 193; before, in place of, and after epilepsy, 169, 228-235; the result of insane emotion, 194; the result of delusion, 208

Homicidal insanity, 125, 126, 140-

170; sudden outbreak of, 155, with mental imbecility, 157; recurrence of, 206

Howden, Dr. J. C., on the religious sentiment in epileptics, 243

IDEA, morbid, 148, 149; synergy of,

Identity, loss of consciousness of, 263

Idiocv. 66, 89; absence of responsibility in, 67

Imbecility, 67: responsibility in, 68; crime in, 68; moral, 179, 242

Impulses, insane, 531

Insane, the manners and appearance of, 2, 3; the motives of, 3, 4; distrust of, 4; barbarous treatment of, 10; executed as witches, 11; the punishment of, 15, 27, 128, 129; belief in inspiration of, 49

Insanity, concealment of, 5; Grecian views of, 6, 7, 8; Hippocrates on, 7, 8; Asclepiades on treatment of, 8; theological view of, 9, 10; metaphysical view of, 13; definition of, 15; moral causes and moral treatment of, 16; no demarcation between sanity and, 38, kinship between epilepsy and, 41; neuralgia and, 41; chorea and, 42; 151; dipsomania and, 43; prophetic mania and, 49; eccentricity and, 55; intellectual, 69; affective, 69, 120-184, 132; classification of, 66-85; hereditary, 79; toxic, 79; idiopathic, 80, 83; sympathetic, 80; epileptic, 82, 227-253; of pubescence, 82; of pregnancy, 82; puerperal, 82; of lactation, 82; climacteric, 82; phthisical, 83; senile, 83, 254-264; sthenic and asthenic, 83; various forms and phases of, 122; early symptoms of, 123, 130; course of, 125; homicidal, 126, 140-170; without delusion, 131; sudden

outbreak of, 155; partial intellectual, 185-226; the prevention of, 268-303; hereditary transmission of, 275, 282; intemperance as a cause of, 283

Intellect, the development of, 303 Intemperance, a cause of insanity, 283

JUDGES, answers of, to the House of Lords, 95-93

Kleptomania, 82, 126

LADD, Judge, on the dicta of English judges, 99; on tests of responsibility, 106 Lamb, Mary, insanity of, 186 Love, the passion of, 277 Life-aims, 294 Lypemania, insanity of, 186 Lucas, Dr. Prosper, on hereditary influence, 307

MACARIUS, St., 10 Mahomet, visions of, 52, 243; the epilepsy of, 53, 243

Mania, the prophetic, 49; general. 70; partial, 70; without delusion, 131; epileptic, 228; transitory, 230, 244, 247
Mansfield, Lord, on responsibility

in insanity, 92

Marc, on homicidal insanity, 145; on masked epilepsy, 167; on concealed insanity, 207 Marriages, wise and unwise, 279-281

McNaughten, trial of, 95

Medical evidence, 86 Memory, loss of, in senile dementia. 255-258; in old age, 260; in apoplexy and fever, 262; in dying,

Melancholia, 71, 73; simple, 123, 131; homicide in, 187 Metaphysics, the spirit of, 12, 13

Meyer, Ludwig, on a masked epi-

lepsy, 167

Mind, relation to body, 9, 12, 15, 17; metaphysical views of, 11; scientific definition of, 15: method of study of, 18; degeneration of, 279; necessity of exercise of, 295 Monasticism, the spirit of, 9

Monomania, 71, 73; condition of mind in, 220

Morality, the inductive study of, 305 Moral insanity, 132, 170-182; Dr. Prichard on, 59, 64, 174; Esquirol on, 175; in connection with epilepsy, 178, 242; with imbecility, 179

Moral nature, the development of,

304

Moral responsibility, defective, 25; degrees of, 34; inductive study

of, 34

Moral sense, scientific study of, 34; deficiency or absence of, 58; a function of organisation, 60; the origin of, 61; degeneracy of, 62-

Morel on morbid varieties, 59; on the classification of insanity, 78-81; on homicidal impulse, 170; on mania as a masked epilepsy, 233; on mania transitoria, 248

Morbid idea, relation of, to will, 144, 148, 149

Movements, synergy of, 224

NATURAL laws, ignorance of, 289; breach of, 290.

Natural science, the study of, 301 Nature, individual differences of, 21; inconsistencies of, 291

Neuralgia, kiuship to insanity, 41 Neurosis, the criminal, 33; the insane, 40, 46, 156, 161; transformation of, 79; the epileptic, 156, 165

Nervous diseases, transformation of, 41; functional and organic, 44

Nicholl, Sir John, on testamentary capacity, 113

PARALYSIS, general, 72; crime in, 75 Perley, Chief Justice, on tests of responsibility, 104

Peacock v. Lowe, case of, 266

Penzance, Lord, on testamentary capacity, 115

Pinel, on insanity without delusion, 141; on recurrent homicidal mania, 206

Plato, on wickedness, 25; on madness and the prophetic mania, 50 Pownall, Dr., case of, 190

Predisposition, hereditary, 46, 275,

Prichard, Dr., on moral insanity, 59, 64, 174

Psychosis, the criminal, 33 Pyromania, 81, 161, 163

RAE, Dr, on Lord Mansfield's dictum, 93

Raptus melancholicus, 187

Reformer, the, temperament of, 53 Religion, the misuse of, 297

Responsibility, criterion of, in insanity, 14, 90-111; in imbecility, 68; in partial insanity, 89; Mr. Justice Tracey on, 90; Judge Ladd on, 99; Chief Justice Bell on, 103; Chief Justice Perley on, 104; Judge Doe on, 107, 111; Hoffbauer on, 209; medical doctrine of, 212; discussion of medical and legal doctrines of, 212-226

Self-control in insanity, 271 Self-formation, 294

Self-deception, 293

Shakspeare on responsibility insauity, 127

Skae, Dr., on the classification of insanity, 81-83; on homicidal impulse, 165

State v. Jones, case of, 99 State v. Pike, case of, 101, 107 State v. Weir, case of, 102 Stevens v. State of Indiana, case of, 103 Smith v. Tubbitt, case of, 115 Somnambulism, 250 Spinoza, on the persistence of dream-

Spinoza, on the persistence of dreamhallucinations, 251; on the control of the feelings, 299 Stylites, Simeon, 10

Suicide, in simple melancholia, 123

Suicidal insanity, 133-140; hereditary transmission of, 131 Swedenborg, epileptic visions of, 243

Sympathy, organic, 17

TEMPERAMENT, the insane, 46, 56, 161

Theology, the spirit of, 9 Thomson, Bruce, on criminals. 30-32 Tracey, Justice, on responsibility in insanity, 90

Transformation of nervous diseases,

Trousseau, on irresistible impulses

in epilepsy, 90; on the understanding in Aphasia, 265

UTILITARIANISM, 305

Wallis, Samuel, case of, 188
Waring v. Waring, case of, 115
Werter, the suice of, 272

Wharton and Stillé on a case of homicidal insanity, 204

Wightman, Justice, on the desire to be hanged, 158

Will, freedom of, 109, 111; power of making a, 111-120; loss of power of, 111, 125; fluctuations of, 149; control of, 269; development of, 273

Wynne, Sir William, on testamentary capacity, 112

Yellowles, Dr. D., on intemperance as a cause of insanity, 284

THE END.



I.

# Tyndall's Forms of Water.

I vol., 12mo. Cloth. Illustrated. . . . . . Price, \$1.50.

"In the volume now published, Professor Tyndall has presented a noble illustration of the acuteness and subtlety of his intellectual powers, the scope and insight of his scientific vision, his singular command of the appropriate language of exposition, and the peculiar vivacity and grace with which he unfolds the results of intricate scientific research."—N. V. Tribune.

"The 'Forms of Water,' by Professor Tyndall, is an interesting and instructive little volume, admirably printed and illustrated. Prepared expressly for this series, it is in some measure a guarantee of the excellence of the volumes that will follow, and an indication that the publishers will spare no pains to include in the series the freshest investigations of the best scientific minds."—Boston Yournal.

"This series is admirably commenced by this little volume from the pen of Prof. Tyndall. A perfect master of his subject, he presents in a style easy and attractive his methods of investigation, and the results obtained, and gives to the reader a clear conception of all the wondrous transformations to which water is subjected."—Churchman.

II.

# Bagehot's Physics and Politics.

1 vol., 12mo. Price, \$1.50.

"If the 'International Scientific Series' proceeds as it has begun, it will more than fulfil the promise given to the reading public in its prospectus. The first volume, by Professor Tyndall, was a model of lucid and attractive scientific exposition; and now we have a second, by Mr. Walter Bagehot, which is not only very lucid and charming, but also original and suggestive in the highest degree. Nowhere since the publication of Sir Henry Maine's 'Ancient Law,' have we seen so many fruitful thoughts suggested in the course of a couple of hundred pages. . . . To do justice to Mr. Bagehot's fertile book, would require a long article. With the best of intentions, we are conscious of having given but a sorry account of it in these brief paragraphs. But we hope we have said enough to commend it to the attention of the thoughtful reader."—
Prof. JOHN FISKE, in the Atlantic Monthly.

"Mr. Bagehot's style is clear and vigorous. We refrain from giving a fuller account of these suggestive essays, only because we are sure that our readers will find it worth their while to peruse the book for themselves; and we sincerely hope that the forthcoming parts of the 'International Scientific Series' will be as interesting."—

"Mr. Bagehot discusses an immense variety of topics connected with the progress of societies and nations, and the development of their distinctive peculiarities; and his book shows an abundance of ingenious and original thought."—ALFRED RUSSELL WALLACE, in Nature.

## III. Foods.

### By Dr. EDWARD SMITH.

Cloth. Illustrated. . . . . . Price, \$1.75. 1 vol., 12mo.

In making up THE INTERNATIONAL SCIENTIFIC SERIES, Dr. Edward Smith was selected as the ablest man in England to treat the important subject of Foods. His services were secured for the undertaking, and the little treatise he has produced shows that the choice of a writer on this subject was most fortunate, as the book is unquestionably the clearest and best-digested compend of the Science of Foods that has appeared in our language.

"The book contains a series of diagrams, displaying the effects of sleep and meals on pulsation and respiration, and of various kinds of food on respiration, which, as the results of Dr. Smith's own experiments, possess a very high value. We have not far to go in this work for occasions of favorable criticism: they occur throughout, but are perhaps most apparent in those parts of the subject with which Dr. Smith's name is especially linked."—London Examiner.

"The union of scientific and popular treatment in the composition of this work will afford an attraction to many readers who would have been indifferent to purely theoretical details. . . . Still his work abounds in information, much of which is of great value, and a part of which could not easily be obtained from other sources. Its interest is decidedly enhanced for students who demand both clearness and exactness of statement, by the profusion of well-executed woodcuts, diagrams, and tables, which accompany the volume. . . . The suggestions of the author on the use of tea and coffee, and of the various forms of alcohol, although perhaps not strictly of a novel character, are highly instructive, and form an interesting portion of the volume."—N. Y. Tribune.

IV.

# Body and Mind.

### THE THEORIES OF THEIR RELATION.

By ALEXANDER BAIN, LL. D.

Cloth. . . . . . . Price, \$1.50. 1 vol., 12mo.

PROFESSOR BAIN is the author of two well-known standard works upon the Science of Mind-"The Senses and the Intellect," and "The Emotions and the Will." He is one of the highest living authorities in the school which holds that there can be no sound or valid psychology unless the mind and the body are studied, as they exist, together.

"It contains a forcible statement of the connection between mind and body, study-"It contains a forcible statement of the connection between mind and body, studying their subtile interworkings by the light of the most recent physiological unvestigations. The summary in Chapter V., of the investigations of Dr. Lionel Beale of the embodiment of the intellectual functions in the cerebral system, will be found the freshest and most interesting part of his book. Prof. Bain's own theory of the connection between the mental and the bodily part in man is stated by himself to be as follows: There is 'one substance, with two sets of properties, two sides, the physical and the mental—a donble-faced unity.' While, in the strongest manner, asserting the union of mind with brain, he yet denies 'the association of union in place,' but asserts the union of close succession in time,' holding that 'the same being is, by alternate fits, under extended and under unextended consciousness."—Christian Register.

V.

# The Study of Sociology.

By HERBERT SPENCER.

12mo. Cloth. . . . . . . . . . . . . . . . . Price, \$1.50.

"The Study of Sociology" was written for the purpose of conveying to the reading public more definite ideas concerning the nature, claims, scope, limits, and difficulties, of the Science of Sociology. It is intended to prepare the way for the author's great work on the "Principles of Sociology," which is to follow the "Principles of Psychology." But, while serving thus as an introduction to the larger work, the present volume is complete in itself. Its style is exceedingly clear and vigorous, and the book abounds with a wealth of illustration.

"The philosopher whose distinguished name gives weight and influence to this volume, has given in its pages some of the finest specimens of reasoning in all its forms and departments. There is a fascination in his array of facts, incidents, and opinions, which draws on the reader to ascertain his conclusions. The coolness and calmness of him a close attention and sustained effort, on the part of the reader, to comprehend, follow, grasp, and appropriate his principles. This book, independently of its bearing upon sociology, is valuable as lucidly showing what those essential characteristics are which entitle any arrangement and connection of facts and deductions to be called a science."—Episcopalian.

"To those who are already acquainted with Mr. Spencer's writing, there is no need of recommending the work; to those who are not, we would say, that by reading 'The Study of Sociology' they will gain the acquaintance of an author who, for knowledge, depth of thought, skill in elucidation, and originality of ideas, stands prominently forward in the front rank of the glorious army of modern thinkers. 'The Study of Sociology' is the fifth of 'The International Scientific Series,' and for beauty of type and elegant appearance is worthy of the great publishing-house of Messrs. Appleton & Co."—Boston Gazette.

"This volume belongs to 'The International Scientific Series,' which was projected with so high a standard and which is being so successfully carried out. The value and character of the whole may fairly be judged by this and the preceding volumes. The principle of the enterprise is that each subject shall be treated by the writer of greatest eminence in that department of inquiry, and it is well illustrated in the present work. Herbert Spencer is unquestionably the foremost living thinker in the psychological and sociological fields, and this volume is an important contribution to the science of which it treats. . . It will prove more popular than any of its author's other creations, for it is more plainly addressed to the people and has a more practical and less speculative cast. It will require thought, but it is well worth thinking about."—Albany Evening Fournal.

"Whether the reader agrees with the author or not, he will be delighted with the work, not only for the beauty and purity of its style, and breadth and cyclopedic character of Mr. Spencer's mind, but also for its freedom from prejudice and kindred imperfections."—Norwich Bulletin.

"This work compels admiration by the evidence which it gives of immense research, study, and observation, and is withal written in a popular and very pleasing style. It is a fascinating work, as well as one of deep practical thought,"—Boston Post.

#### VI.

# The New Chemistry.

By JOSIAH P. COOKE, JR.,

Erving Professor of Chemistry and Mineralogy in Harvard University.

1 vol., 12mo. Cloth. . . . . . . . . . . . . . Price, \$2.00.

"The book of Prof. Cooke is a model of the modern popular science work. It has just the due proportion of fact, philosophy, and true romance, to make it a fascinating companion, either for the voyage or the study,"—Daily Graphic.

"This admirable monograph, by the distinguished Erving Professor of Chemistry in Harvard University, is the first American contribution to 'The International Scientific Series,' and a more attractive piece of work in the way of popular exposition upon a difficult subject has not appeared in a long time. It not only well sustains the character of the volumes with which it is associated, but its reproduction in European countries will be an honor to American science. It is, moreover, in an eminent degree, timely, for, between the abandonment of its old views and the bewilderment caused by the new, chemical science was getting into a demoralized condition. A work was greatly needed that should relieve the discomfort of transition, and bridge over the gulf between the old order of ideas and those which are to succeed them. Professor Cooke's compendious contribution to the present exigencies of chemical literature will give the students of the science exactly the help they need, and pass them over by an easy and pleasant route into the new realm of chemical philosophy."—New York Tribune.

"All the chemists in the country will enjoy its perusal, and many will seize upon it as a thing longed for. For, to those advanced students who have kept well abreast of the chemical tide, it offers a calm philosophy. To those others, youngest of the class, who have emerged from the schools since new methods have prevailed, it presents a generalization, drawing to its use all the data, the relations of which the newly-fledged fact-seeker may but dimly perceive without its aid. . . . To the old chemists, ProC. Cooke's treatise is like a message from beyond the mountain. They have heard of changes in the science; the clash of the battle of old and new theories has stirred them from afar. The tidings, too, had come that the old had given way; and little more than this they knew. . . . Prof. Cooke's 'New Chemistry' must do wide service in bringing to close sight the little known and the longed for. . . . As a philosophy it is elementary, but, as a book of science, ordinary readers will find it sufficiently advanced."— Utica Morning Herald.

"A book of much higher rank than most publications of its class. It treats only of modern chemical theories—relating to molecules, combining proportions, reactions, atomic weights, isomerism, and the synthesis of organic compounds—taking one into the very arcana of chemical mysteries. Though there are no more recondite branches of the science than those here explained and illustrated, such is Professor Cooke's cleamess that he may be said to make every thing plain to the average reader, who will but take pains with his lessons. Professor Cooke reminds us, in his simplicity and lucidity of statement, of Professor Tyndall, than which there can be no higher praise."—New York Yournal of Commerce.

"The aim of the work is to furnish a hand-book of a symmetrical science, resting fundamentally upon the law of Avogadro that 'equal volumes of all substances, when in the state of gas and under like conditions, contain the same number of molecules.' It is to a rigid adherence to this law and the deductions which flow from it that chemistry, as now taught, owes the marked difference which separates it from the chemistry taught a few years ago. The original lectures of Professor Cooke, enlarged and somewhat modified, present in their present form a clear and full exposition of the science, and will form a useful text-book as well as a volume of unusual interest to the lovers of physical science."—New York World.

#### VII.

# The Conservation of Energy.

By BALFOUR STEWART, LL.D.

With an Appendix, treating of the Vital and Mental Applications of the Doctrine.

I vol., 12mo. Cloth. . . . Price, \$1.50.

Note to the American Edition.

"The great prominence which the modern doctrine of the Conservation of Energy or Correlation of Forces has lately assumed in the world of thought, has made a simple and popular explanation of the subject very desirable. The present work of Dr. Balfour Stewart, contributed to the 'International Scientific Series,' fully meets this requirement, as it is probably the clearest and most elementary statement of the question that has yet been attempted. Simple in language, copious and familiar in illustration, and remarkably lucid in the presentation of facts and principles, his little treatise forms just the introduction to the great problem of the interaction of natural forces that is required by general readers. But Prof. Stewart having confined himself mainly to the physical aspects of the subject, it was desirable that his views should be supplemented

physical aspects of the subject, it was desirable that his views should be supplemented by a statement of the operation of the principle in the spheres of life and mind. An Appendix has, accordingly, been added to the American edition of Dr. Stewart's work, in which these applications of the law are considered.

"Prof. Joseph Le Conte published a very able essay fourteen years ago on the 'Correlation of the Physical and Vital Forces,' which was extensively reprinted abroad, and placed the name of the author among the leading interpreters of the subject. His mode of presenting it was regarded as peculiarly happy, and was widely adopted by other writers. After further investigations and more mature reflection, he has recently restated his views, and has kindly furnished the revised essay for insertion in this volume.

"Prof. A Bain the celebrated Psychologist of Aberdeen, who has done so much

"Prof. A. Bain, the celebrated Psychologist of Aberdeen, who has done so much Troi. A. Bain, the celebrated resyndrologist of Aberdeen, who has done so much to advance the study of mind in its physiological relations, prepared an interesting lecture not long ago on the 'Correlation of the Nervous and Mental Forces,' which was read with much interest at the time of its publication, and is now reprinted as suitable exposition of that branch of the subject. These two essays, by carrying out the principle in the field of vital and mental phen omena, will serve to give completeness and much greater value to the present volume."

"The great physical generalization called 'The Conservation of Energy' is in an intermediate state. It is so new that all kinds of false ideas are prevalent about it; it is so exact that these cannot be tolerated; and thus its circumstances are such as to make so thorough and simple a treatise as this, by Prof. Balfour Stewart, a boon to

"The scheme of the book is simple, as is naturally the case when the subject-mater comprehends but one single law of Nature and its manifestations. The first two chapters are devoted to the consideration of mechanical energy and its change into heat, Prof. Stewart rightly devoting special attention to these two forms of energy, compared with which all others are insignificant in practical, if not in theoretical, important of the second of the sec portance. The remaining forms of energy are then explained, and the law of its conservation is stated, and its operation traced through all varieties of transmutations. An servation is stated, and its operation traced through all varieties of transmitations. Mistorical sketch of the progress of the science and an examination of Prof. Thomson's correlative theory of the 'Dissipation of Energy 'follow; and the work-concludes with a chapter on the 'Position of Life,' which is closely connected with a well-known essay written some years ago by Prof. Stewart and Mr. Lockyer. The style is all that it should be; it is difficult to understand how so much information can be contained in so few words. Prof. Stewart could not have been nearly so successful in this respect had he been in any degree a pedant. No such writer would permit himself to use the quaint language and still quainter similes and and illustrations that make the book so readable, and yet there is scarcely one that is out of place, or illegitimately used, or likely to mislead."—Saturday Review.

## RELIGION AND SCIENCE.

A Series of Sunday Lectures on the Relation of Natural and Revealed Religion, or the Truths revealed in Nature and Scripture.

### By JOSEPH LE CONTE,

PROFESSOR OF GEOLOGY AND NATURAL HISTORY IN THE UNIVERSITY OF CALIFORNIA.

12mo, cloth. Price, \$1.50.

#### OPINIONS OF THE PRESS.

"This work is chiefly remarkable as a conscientious effort to reconcile the revelations of Science with those of Scripture, and will be very useful to teachers of the different Sunday-schools."—Detroit Union.

"It will be seen, by this risumi of the topics, that Prof. Le Conte grapples with some of the gravest questions which agitate the thinking world. He treats of them all with dignity and fairness, and in a manner so clear, persuasive, and eloquent, as to engage the undivided attention of the reader. We commend the book cordially to the regard of all who are interested in whatever pertains to the discussion of these grave questions, and especially to those who desire to examine closely the strong foundations on which the Christian faith is reared."—Boston Fournal.

"A reverent student of Nature and religion is the best-qualified man to instruct others in their harmony. The author at first intended his work for a Bible-class, but, as it grew under his hands, it seemed well to give it form in a neat volume. The lectures are from a decidedly religious stand-point, and as such present a new method of treatment."

—Philadelphia Age.

"This volume is made up of lectures delivered to his pupils, and is written with much clearness of thought and unusual clearness of expression, although the author's English is not always above reproach. It is partly a treatise on natural theology and partly a defense of the Bible against the assaults of modern science. In the latter aspect the author's method is an eminently wise one. He accepts whatever science has proved, and he also accepts the divine origin of the Bible. Where the two seem to conflict he prefers to await the reconciliation, which is inevitable if both are true, rather than to waste time and words in inventing ingenious and doubtful theories to force them into seeming accord. Both as a theologian and a man of science, Prof. Le Contc's opinions are entitled to respectful attention, and there are few who will not recognize his book as a thoughtful and valuable contribution to the best religious literature of the day."—New York World.

# DESCRIPTIVE SOCIOLOGY.

Mr. Herbert Spencer has been for several years engaged, with the aid of three educated gentlemen in his employ, in collecting and organizing the facts concerning all orders of human societies, which must constitute the data of a true Social Science. He tabulates these facts so as conveniently to admit of extensive comparison, and gives the authorities separately. He divides the races of mankind into three great groups: the savage races, the existing civilizations, and the extinct civilizations, and to each he devotes a series of works. The first installment,

## THE SOCIOLOGICAL HISTORY OF ENGLAND,

in seven continuous tables, folio, with seventy pages of verifying text, is now ready. This work will be a perfect Cyclopædia of the facts of Social Science, independent of all theories, and will be invaluable to all interested in social problems. Price, five dollars. This great work is spoken of as follows:

#### From the British Quarterly Review.

"No words are needed to indicate the immense labor here bestowed, or the great sociological benefit which such a mass of tabulated matter done under such competent direction will confer. The work will constitute an epoch in the science of comparative sociology."

#### From the Saturday Review.

"The plan of the 'Descriptive Sociology' is new, and the task is one eminently fitted to be dealt with by Mr. Herbert Spencer's faculty of scientific organizing. His object is to examine the natural laws which govern the development of societies, as he has examined in former parts of his system those which govern the development of individual life. Now, it is obvious that the development of societies can be studied only in their bistory, and that general conclusions which shall hold good beyond the limits of particular societies cannot be safely drawn except from a very wide range of facts. Mr. Spencer has therefore conceived the plan of making a preliminary collection, or perhaps we should rather say abstract, of materials which when complete will be a classified epitome of unive. sal history."

#### From the London Examiner.

"Of the treatment, in the main, we cannot speak too highly; and we must accept it as a wonderfully successful first attempt to furnish the student of social science with data standing toward his conclusions in a relation like that in which accounts of the structures and functions of different types of animals stand to the conclusions of the biologist."

# NATURAL PHILOSOPHY:

AN ELEMENTARY TREATISE.

#### By PROFESSOR DESCHANEL, of Paris.

Translated, with Extensive Additions,

BY J. D. EVERETT, D. C. L., F. R. S.,
PROFESSOR OF NATURAL PHILOSOPHY IN THE QUEEN'S COLLEGE. BELFAST.

1 vol., medium 8vo. Illustrated by 760 Wood Engravings and 3 Colored Plates. Cloth, \$6.50, Published, also, separately, in Four Parts. Limp cloth, each \$1.75.

Part I. MECHANICS, HYDROSTATICS, and PNEUMATICS. Part II. HEAT.
Part III. ELECTRICITY and MAGNETISM. Part IV. SOUND and LIGHT.

### Saturday Review.

"Systematically arranged, clearly written, and admirably illustrated, showing no less than than 760 engravings on wood and three colored plates, it forms a model work for a class of experimental physics. Far from losing in its English dress any of the qualities of matter or style which distinguished it in its original form, it may be said to have gained in the able hands of Professor Everett, both by way of arrangement and of incorporation of fresh matter, without parting in the translation with any of the freshness or force of the author's text."

#### Athenœum.

"A good working class-book for students in experimental physics."

#### Westminster Review.

"An excellent handbook of physics, especially suitable for self-instruction....
The work is published in a magnificent style; the woodcuts especially are admirable."

## Quarterly Journal of Science.

"We have no work in our own scientific literature to be compared with it, and we are glad that the translation has fallen into such good hands as those of Professor Everett. . . . It will form an admirable text-book."

#### Nature.

"The engravings with which the work is illustrated are especially good, a point In which most of our English scientific works are lamentably deficient. The clearness of Deschanel's explanations is admirably preserved in the translation, while the value of the treatise is considerably enhanced by some important additions. . . . We believe the book will be found to supply a real need."

## D. APPLETON & CO., New York.

## NEW SCIENTIFIC WORKS.

### The Beginnings of Life:

Being some Account of the Nature, Modes of Origin and Transformation of the Lower Organisms. By H. CHARLTON BASTIAN, M. D., F. R. S. 2 vols., 8vo. With upward of 100 Illustrations. Price, \$5.00.

"His preliminary chapters on the correlation of the vital and physical forces, on the nature and theories of life, on organized and organizable matter, on the relations of the animal, vegetable, and mineral kingdoms, and on cell-phenomena and cell-doctrines, form the clearest and most readable exposition of these subjects that we have yet seen, and they have a value quite independent of the special inquiry to which they are an introduction."—Popular Science Monthly,

"It is a book which will make its mark, and must produce a powerful sensation."-

# The Ancient Stone Implements, Weapons, and Ornaments of Great Britain.

By JOHN EVANS, F. R. S., F. S. A., Honorary Secretary of the Geological and Numismatic Societies of London, etc. I vol., 8vo. With 2 Plates and 476 Woodcuts. Price, \$5.00.

"We congratulate all those who are interested in these researches—and they are now many—on the ample and valuable additions which the author has made to this new and interesting chapter in the history of our race."—Nature.

## Town Geology.

By the Rev. Chas. Kingsley, F. L. S., F. G. S., Canon of Chester. vol. Cloth. Price, \$1.50.

An interesting and valuable book. The high standing of the author is a sufficient guaranty for the excellence of the work, and will secure for it an extensive circulation.

## A Hand-Book of Chemical Technology.

By RUDOLF WAGNER, Ph. D., Professor of Chemical Technology at the University of Wurtzburg. Translated and edited, from the eighth German edition, with extensive Additions. By WM. CROOKES, F. R. S. With 336 Illustrations. I vol., 8vo. 761 pages. Cloth, \$5.00.

The several editions of Professor Rudolf Wagner's "Handbuch der Chemischen Technologie" have succeeded each other so rapidly, that no apology is needed in offering a translation to the public.

## D. APPLETON & CO., Publishers,

549 & 551 Broadway, New York.

THE

# POPULAR SCIENCE MONTHLY.

Professor E. L. YOUMANS.

THE growing importance of scientific knowledge to all classes of the community calls for more efficient means of diffusing it. THE POPULAR SCIENCE MONTHLY has been started to promote this object, and supplies a want met by no other periodical in the United States.

It contains instructive and attractive articles, and abstracts of articles, original, selected, and illustrated, from the leading scientific men of different countries, giving the latest interpretations of natural phenomena, explaining the applications of science to the practical arts, and to the operations of domestic life.

It is designed to give especial prominence to those branches of science which help to a better understanding of the nature of man; to present the claims of scientific education; and the bearings of science upon questions of society and government. How the various subjects of current opinion are affected by the advance of scientific inquiry will also be considered.

In its literary character, this periodical aims to be popular, without being superficial, and appeals to the intelligent reading-classes of the community. It seeks to procure authentic statements from men who know their subjects, and who will address the non-scientific public for purposes of exposition and explanation.

It will have contributions from HERBERT SPENCER, Professor HUXLEY. Professor Tyndall, Mr. Darwin, and other writers identified with specu-

lative thought and scientific investigation.

THE POPULAR SCIENCE MONTHLY is published in a large octavo, handsomely printed on clear type. Terms, Five Dollars per annum, or Fifty Cents per copy.

#### OPINIONS OF THE PRESS.

"Just the publication needed at the present day."-Montreal Gazette.

"It is, beyond comparison, the best attempt at journalism of the kind ever made in this country."—Home Journal.
"The initial number is admirably constituted."—Evening Mail.

"In our opinion, the right idea has been happily hit in the plan of this new monthly." -Buffalo Courier.

"A journal which promises to be of eminent value to the cause of popular education in this country."—N. Y. Tribune.

#### IMPORTANT TO CLUBS.

THE POPULAR SCIENCE MONTHLY will be supplied at reduced rates with any periodical published in this country.

Any person remitting Twenty Dollars for four yearly subscriptions will receive an ex-

tra copy gratis, or five yearly subscriptions for \$20.

THE POPULAR SCIENCE MONTHLY and APPLETONS' JOURNAL (weekly), per annum, \$8.00

Payment, in all cases, must be in advance,

Remittances should be made by postal money-order or check to the Publishers,

D. APPLETON & CO., 549 & 551 Broadway, New York.













NLM 00560856 6





